# THE LANCET.

## LECTURES

ON THE

## ANATOMY, PHYSIOLOGY, AND DISEASES OF THE EYE.

By MR. LAWRENCE.

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### LECTURE XIV.

*Strumous or Scrofulous Ophthalmia.*

Gentlemen,

Strumous or scrofulous ophthalmia is an external inflammation of the eye, exhibiting certain modifications in its symptoms, progress, and consequences, derivable from peculiarities of constitution in the individuals whom it affects, and requiring corresponding modifications in treatment. We might say, that scrofulous ophthalmia is inflammation of the eye, occurring in strumous subjects. Now we know that there are great natural diversities of organization, and consequently great varieties in the dispositions to disease in the human race; we find, indeed, that almost every individual has something peculiar to himself. We cannot, therefore, in making our observations on diseases, and on the effects of remedies, fail to admit that there is something peculiar in the constitutions of different individuals. If mankind were all alike, the business of the physician and surgeon would be much more simple than it is.

There are certain congenital peculiarities of organization, the assemblage of which is denoted by the phrase "strumous constitution." Some individuals are subject to certain forms of disease, which come on so easily and return so readily, that it is almost impossible to prevent their occurrence. We see disposition to disease in certain structures, as in the absorbent glands, the lungs, and the mucous membranes. Of the latter, those most exposed to the external air, suffer most; for instance, those of the nose, lungs, and eyes. There is also a particular disposition to disease in such parts of the body as are glandular in their structure; hence there is frequently, in such individuals, a thickening and tumefaction about the nose and upper lip, and in the glands of the lids. The mucous membranes of these individuals are easily disturbed; those of the alimentary canal are deranged by slight errors of diet, in quantity or quality, or by trifling causes, which would produce no effect on other persons, or at least would not materially derange the functions of the stomach and bowels. When these organs are disturbed in their functions, the whole nutrition of the body becomes more or less impaired. We observe a general want of energy, a paleness, and a disposition to coldness in the skin in such persons, and a flaccidity in the muscular fibres generally. The vital processes in general, and the functions of the nervous system in particular, go on languidly. There is another description of individuals who display a greater degree of nervous irritability; slight external agents act on them with greater force. They have very thin skin, and the cutaneous veins appear through it. These peculiarities are seen from infancy; and therefore we ascribe them to original configuration; and further consider, that they are transmitted from parents to children.

A similar disposition to disease may be also acquired: the crowding together of numerous persons in confined dwellings, the unwholesome air of large towns, and the want of domestic comforts are the most powerful agents in producing such effects. Their injurious influence is particularly observable on the health of children in the poorer classes of cities, where large families not only live in small houses, but even in single rooms; where they are badly clothed and fed, and where there is great inattention to personal cleanliness. A state of constitution is produced, by the combined influence of such circumstances, not distinguishable from that

hereditary disposition to disease before described; and it is particularly evidenced in an unhealthy condition of the alimentary canal and skin, and in a consequently vitiated condition of the whole frame.

The circumstances I have mentioned are exhibited in the most striking manner in the earlier periods of life. The changes which occur at puberty, render the body less susceptible of disease, or at least of those forms called strumous, so that the latter are seldom seen after that period. Again, strumous disease is not seen in the earliest periods of life. It is very unusual to observe any form of it in the infant. Perhaps this is owing to the kind of food which is prepared for the infant by nature, and which agrees very well with its organization, supplying the materials from which the body is built up, without producing any derangement in the functions of the organs; moreover, most of the exciting causes of disease are absent. During the period from the end of suckling to puberty, the various processes of nutrition and growth are going on with great activity, and then if any cause interfere with them, disease is readily produced. Afterwards, the circulating and absorbing systems are not so actively at work. Hence we shall expect to find strumous ophthalmia almost confined to young subjects; but among them it is very frequent. Beer states, that at Vienna, of one hundred children affected with inflammation of the eye, ninety had that form called scrofulous. A more recent German writer on this subject says, that Beer's statement is by no means exaggerated, and that in the town in which he resided, Breslau, in Silesia, which is ill built, and not well ventilated, the proportion was ninety-five in a hundred. We might expect that scrofulous ophthalmia would be found a very frequent disease in England, and especially in London. It has been supposed, that scrofula is a frequent disease in this country; but if the observations of Professor Benedict of Breslau, and of Beer, be correct, it appears that such diseases are not more numerous here than in other countries. The late Dr. Gregory used to remark in his lectures, that there is not a family in Scotland in which traces of scrofula may not be found.

There is a great tendency in strumous individuals to inflammations of the lids; they take on the form of induration and thickening, or of hordeolum. The lachrymal sac and nasal duct also frequently suffer in such habits. These subjects I shall not advert to at present, wishing now to direct your attention to an external inflammation of the eye, of a strumous character, originally seated in the conjunctiva, often affecting the sclerotic coat and cornea, seldom going deeper, but occasionally extending even to the iris.

*Symptoms.*—There is increased redness of the eye, and that redness is partial, in patches; the distended vessels are in fasciculi, which run toward the cornea, and extend over its margin, or stop short at the boundary between it and the sclerotica. Where the fasciculi terminate, you will generally see little pustules produced. There is great intolerance of light; light is very painful to the organ, and the uneasiness produced by its presence is carried to an extreme degree, so as to constitute a distinguishing symptom of the complaint. The lids are spasmodically closed, and a most powerful contraction of the orbicularis palpebrarum offers an effectual obstacle to any attempt at opening them. If they are forced open, the cornea is turned up under the edge of the orbit, away from the light. The spasmodic action of the orbicularis excited by exposure to light, causes actual pressure on the eye, and makes the child scream with pain. This action of the orbicularis makes the lids look as if they were swollen, but they are not so. The child makes an effort to protect the organ from the painful impression of light, contracts the brows, and draws up the alæ of the nose, and puts into action all the muscles of the face. Hence arises a peculiar and characteristic physiognomy of the disease, so that you can easily determine its nature on the first sight of the child. The painful impression of light upon the organ in severe cases, is such that the child seeks the very darkest corner of the room, to escape from the light, and, if in bed, it will turn the face against the pillow, or hide it under the clothes, to accomplish the same purpose. For the same reason, if brought into the light it presses the hand against the eyes and holds the head down; great irritation, redness and eruption being often produced upon the forehead and nose by so doing. This position of the head cannot take place without producing a greater determination of blood to the affected parts; and the consequence is that the disease in the eye is aggravated. This great sensibility of the retina is not the result of inflammation, nor is it in a direct proportion to the increased redness, being often excessive where the eye appears almost natural; indeed redness is not essential to the disease; but it is a sympathetic or functional affection merely In such cases as I am now describing to you, there is no immediate disorder whatever of the retina; the child will be able

to open its eyes, and to see as well as if there was nothing the matter with them, towards dusk, or in the evening. It is a disordered sensibility of the retina, dependent on the state of the alimentary canal. Of the nature of that connexion, or of the mode of influence, we know nothing; it is called sympathy, but that term does not explain how the phenomenon happens. The retina, however, is not immediately affected, nor are you to expect that vision will be impaired.

There is a copious flow of tears in scrofulous ophthalmia when the affection is first produced; the external surface of the organ suffers great irritation, the lachrymal gland sympathises with that irritation, and the flow of tears is increased in a very marked way, so that when you attempt to examine the eye, a quantity of acrid hot fluid runs out from between the lids. When the eye is exposed to light, a copious flow of hot scalding tears takes place; the passage of these into the nose excites sneezing, often for several times in succession. These irritating tears produce redness of the lids, and excoriate the palpebræ and face. They cause itching and soreness in the parts upon which they fall and aggravate the original complaint; the child rubs and scratches the affected parts, which become very red, sore, and pimply. Small yellow pustules form on this inflamed skin, and produce a discharge which incrusts. The affection extends on the forehead, temples, and face, the pustules and incrustations increasing; in its worst form it is called *crusta lactea*, and is the state of skin called by Dr. Willan *porrigo larvalis*, from its coating the face like a mask. Now an eruption of this kind, commencing in the lids and spreading over the face and head, will sometimes extend over the body.

The mucous membrane of the nose is often affected; there is an acrid secretion with excoriation of the nostrils, with swelling and redness of the alæ nasi, and often a very tumid condition of the upper lip. The ears are red and sore, and often excoriated behind; and the absorbent glands of the neck are frequently swelled.

The symptoms are worse during the day; there is a remission when the sun has descended below the horizon. Children, who have hid themselves in the dark all day, recover their activity at night and open their eyes without pain.

The inflammation of the eye may suddenly get better, and will as suddenly return. There are often repeated attacks at longer or shorter intervals, and slight exciting causes will renew disorder where the disposition is strong. In this way the affection lasts for months and years, and it is difficult to say when the patient is permanently recovered. The affection of the eye often alternates with other symptoms; the ears become worse, and the eyes get better, or vice versa.

These cases are generally accompanied by a disordered state of the stomach and bowels; and you should endeavour to correct that disordered state, and when you can do so you will find the tendency to relapse removed also. If you examine into the condition of the child's health minutely, you will find that there is a furred tongue, a fetid breath, a tumid or distended abdomen, and a grinding of the teeth during sleep, with an unnatural, morbid or depraved kind of appetite. The state of the skin is generally unhealthy, having a harsh, dry, or scaly feeling and appearance.

Scrofulous inflammation of the eye often produces very serious consequences, particularly on the cornea, and it may do so, although the external redness may not be in a great degree. We are accustomed to measure the degree of inflammation and to judge of its consequences, in other forms of ophthalmia, by the extent of the exterior redness, but in strumous inflammation, the progress of the complaint is very insidious, and we may have changes of structure produced in the cornea when the symptoms are not of a very marked kind. The pustules, which I mentioned as being formed at the end of the fasciculi of vessels, often go into ulceration, and this ulceration may extend deeply into the cornea, and pass through the whole of its laminæ, so as to occasion prolapsus iridis; there may be two or more of such ulcers. There is often a dulness of the cornea produced by an interstitial deposit into its texture. Red vessels extend from the conjunctiva and sclerotica over the cornea, the texture of the corneal conjunctiva becoming at the same time thickened and opaque: these changes proceed sometimes to the extent of making the whole cornea red and opaque, causing the appearance technically called pannus. In such a great and serious affection of the cornea, there will occasionally be produced adhesion of the iris to it; and as the texture of the cornea is weakened, it may yield to the pressure from within, and be enlarged into the external protuberance called *staphyloma*. These are the disorganizing processes effected in the external parts of the eye by strumous inflammation; and the changes of structure produced by this affection are generally limited to the external parts of the organ. Occasionally the effects of strumous inflammation extend to the sclerotic coat and iris; but we have seldom an oppor-

tunity of observing the first stage of this change in the iris, on account of the changes going on in the cornea. When scrofulous ophthalmia has existed a great length of time, or when the patient has had repeated and severe attacks, the sclerotic coat may be so much changed in structure, that the form of the eye may be altered; the coat may yield to the pressure of the contained parts. A greater secretion of the internal humours taking place, the eyeball gradually enlarges, and you have what is called hydrophthalmia produced. Or you may have the sclerotic coat yielding partially to the pressure exerted on it, and then there will be staphyloma scleroticæ found.

*Diagnosis.*—Strumous ophthalmia is distinguished by the characters I have mentioned; by the intolerance of light combined with trifling external redness and copious lachrymal secretion. These symptoms frequently co-existing with the other marks of strumous inflammation in the lips, the nostrils, behind the ears, and in the glandular structures in other parts of the body, form altogether so well marked an affection, that you cannot confound it with others.

*Prognosis.*—The prognosis is favourable so long as the cornea remains clear. It is favourable if the cornea should be opaque, provided the opacity be only superficial, or if it appear to be owing to deposition between the laminæ of the cornea, for you may, by suitable treatment, generally succeed in removing it. Ulceration leaves behind a permanent opacity, which very seriously injures vision when it is opposite to the pupil. Should it be attended with prolapsus iridis, the consequences are worse, but much depends on the position and extent of the protrusion. The cornea, when vascular, and it often becomes vascular when the affection is neglected, may generally be restored to its natural smoothness and transparency. If several ulcers have formed on the cornea and have extended deeply, if it should have become generally opaque, and if there be also affection of the iris or change of structure in the sclerotica, the prospect is most unfavourable.

In describing diseases, we find it necessary to select the most prominent cases for our purpose; we turn our attention to the instances in which the characters of the disease are best marked. We do not find diseases occurring exactly as they are described in books and lectures; and they, who are only acquainted with them as they are pictured in books, discover, when they have to examine the sick, that several morbid affections are not so clearly characterised as they expected. If we establish a certain number of diseases, we set up so many artificial points to be attended to; but all forms of disease are not to be arranged under the heads which we have selected; we find that there is an insensible gradation between the forms of disease upon which we have chosen to descant. There is such an insensible gradation from one to the other, that we cannot draw a precise boundary between strumous and common ophthalmia. Nature has not made those nosological distinctions which we find in books; they are the mere products of the ingenuity of men. There is a troublesome inflammation, occurring in the eyes of children, which appears to be referrible to the state of the skin, stomach, and bowels, and which does not present all the characters I have mentioned as belonging to the strumous affection just described. You will find more of the symptoms of common inflammation; more external redness; not so much intolerance of light; nor so many marks of strumous disposition in the system. In severe cases of highly delicate strumous children, you will have intolerance of light without any other symptom, and you will find that this has sometimes received a distinct name, having been called *photophobia scrofulosa*, or the scrofulous intolerance of light. Between this simple intolerance on one hand, and acute external inflammation with general and vivid redness on the other, there is every possible intermediate shade. In infants, who are the subjects of *crusta lactea*, the eye suffers sometimes from the extension of the cutaneous affection. These various affections in children may be considered however, in point of pathology and treatment, as coming under the head of strumous ophthalmia.

*Causes.*—Besides the circumstances to which I have already directed your attention, as predisposing to this affection; besides the constitutional tendency to the complaint, and the unhealthy condition of the digestive organs and skin arising out of that tendency, you will observe the unfavourable influence of all those external circumstances which are capable of exciting ordinary inflammation in other infants. Exposure to cold and wet favours the occurrence of strumous affections generally, and not less so that of scrofulous ophthalmia. Hence children suffer much, especially when insufficiently clothed, from cold East and North winds, and from sudden changes in the weather. The disposition to strumous inflammation

will be called into action by any of those causes which weaken the constitution; it is found frequently to occur after measles, small-pox, hooping cough, scarlet fever, in short after the operation of any causes which have produced a temporary debility of the system.

*Treatment.*—The treatment of strumous ophthalmia must be principally directed to removing that unhealthy condition of the digestive organs and skin, which is so prominent a feature in the complaint, and consequently to invigorating the constitution. Unless these objects can be accomplished, means applied to the eye will be of no service. Hence the treatment is more general than local. In the first place the state of the alimentary canal must be attended to. This is generally in such a condition, as to require the use of purgatives; and those of a very active kind are often necessary, even in young children. You may begin by giving an active dose of calomel with jalap or rhubarb, or calomel followed by castor-oil, and it may be necessary to repeat these purgatives two or three times, to be satisfied that the canal is completely freed from the accumulated load of ill-digested food and unhealthy secretions. The administration of two or three such doses often produces the greatest relief to the sufferings of the child. When this has been accomplished, a mild course of alterative and aperient medicines will be useful; such as calomel and rhubarb in small doses, every second or third day, or the hydrarg. c. creta with magnesia or rhubarb, or calomel with antimony. After the bowels have been evacuated, it is often advantageous to combine light tonics with the aperients; bark or calumba may be given with rhubarb, two or three times in the day; the extract of bark may be used. The dilute sulphuric acid is a good tonic in these cases; ten to thirty drops may be given three times a day, in water or infusion of roses sweetened with a little sugar. Steel has an excellent effect in pallid and languid subjects; the tinctura ferri ammoniati, and the vinum ferri are the most convenient forms; the latter may be combined with the dilute sulphuric acid, and given in the infusion of roses. Alterative medicines should be continued at the same time, and a few grains of hydrargyrus c. creta will very well answer the purpose; some rhubarb may be added, when the bowels require it.

In cases of this kind, the regulation of diet is very necessary, both as regards the quantity and quality of the food; the number of times in the day in which food should be given, must also be attended to. Children of strumous habit should by no means be condemned to low or vegetable diet; they should have plain but wholesome and nutritious food, such as meat, milk, eggs, bread, and other farinaceous substances. It will be sufficient to take meat once a day; but if febrile excitement or much irritability exists, or if the tongue is foul and the breath offensive, it should be omitted. When strength is restored, if there is disposition to fulness of habit, meat should be allowed only sparingly, or even entirely omitted. Porter or wine should be allowed only where there are obvious signs of debility, and here they may supersede medical cordials and tonics. Patients should not be permitted to take food in the intervals of meals; and it is particularly necessary to attend to this point in the numerous instances where there is unnatural craving for food.

The condition of the skin should be particularly attended to; the warm bath has a powerful effect in strengthening the cutaneous circulation, and the increased determination to the capillaries of the skin relieves the affected parts. If warm bathing cannot be easily procured, let the surface be washed daily with warm water, with the occasional addition of soap, and then well dried by rubbing with a towel; common salt may be added to the water thus used, to bring it to the strength of sea water. When the strength is in some degree restored, the shower or cold bath may be used. The clothing should be warm, particularly in cold weather. It is absurd to expose weak and delicate children to the cold, as is commonly done, under the idea of invigorating them. Some of these naturally feeble beings must be treated like exotic plants; we must keep the latter in hot houses, if we wish to save them, and not expose them to all the vicissitudes of our atmosphere. I do not mean to say that they should never be exposed to the air, quite the contrary; but that they should not be so exposed, except when properly protected by suitable clothing; under this restriction air and exercise should never be lost sight of. Here it may be necessary to consider how far the air of the sea may be beneficial to strumous children. Undoubtedly the influence of the air on the sea coast during the mild seasons of the year is very advantageous to such constitutions. But there is an objection arising from the intolerance of light, which accompanies strumous ophthalmia, and from the morbid susceptibility, which often continues after the other symptoms are at an end. The glare of light from the water and the

sand is very offensive to the eyes so long as this unnatural sensibility continues; consequently a healthy inland situation is preferable to the coast under those circumstances. When, however, this particular source of inconvenience is gone by, there can be no doubt that the air of the sea is very advantageous.

When the constitutional disturbance is considerable, and the local disease active,—when the changes of structure already described are going on in the cornea, and that part is becoming vascular and opaque, you must have recourse to mercury, and that pretty decidedly, after you have thoroughly evacuated the bowels. Calomel combined with James's or Dover's powder will answer the purpose; a grain of the former may be combined with two grains of either of the latter, and given once, twice, or thrice a day. The hydrargyrus cum creta may be employed in the dose of four or five grains. These means must be repeated and continued according to circumstances; they must be persevered in until the disorganising processes are checked, which is generally accomplished in children without the affection of the mouth.

With respect to local means, the first point is to decide how far it is right to abstract blood. Leeches must be applied sparingly in these cases. You must particularly guard against the error of supposing that leeches are necessary in proportion to the intolerance of light; for it is found by experience the depletion rather increases the irritability of the organ, which is again lessened by tonics and a generous and nutricious diet. In cases which partake of the nature of common inflammation, and where there is much external redness with the other symptoms, leeches are proper; but I seldom use them until after the exhibition of an active purge. They are also to be used in conjunction with the internal means already mentioned, when disorganizing inflammation is going on in the cornea. I believe that the best local application is warm water, or poppy fomentation. As regards the intolerance of light, that may be often relieved by a fomentation of a strong decoction of poppies and chamomile flowers; a bit of soft flannel wrung out of this fluid and applied to the eye as warm as it can be borne is frequently very comfortable to the feelings of the patient. It is doubtful whether the intolerance of light and spasm of the lids can be relieved by the local employment of opium. I rely on the internal and general measures already described. If you should be disposed to use opium, you will find Mr. Battley's liquor opii sedativus the best form. Half a drachm or a drachm may be added to an ounce of rose water for a wash, to be used tepid. Two or three drops may be allowed to pass between the lids.

Blisters, after the necessary evacuations, are very serviceable in cases of strumous ophthalmia; they will often give decided relief to the photophobia, or the intolerance of light; they should be applied to the back of the neck, or behind the ears. It is necessary to be cautious in the use of blisters, especially in young subjects. I have often seen them irritate the skin of children very much, and I may mention that I have seen severe inflammation and ulceration produced by them, and even fatal mortification. I never think of applying blisters until the bowels have been well cleared of their contents; and I am not inclined to keep them open. It is a proper precaution to limit their application to six or eight hours; a blister in six hours will generally produce inflammation enough for the purpose. The German writers have recommended the tartar emetic ointment to be rubbed in on the temples, behind the ears, or on the back of the neck, especially when change of structure is going on in the cornea. I am more in the habit of making an issue in the temple in such cases. It is one of the most powerful remedies, and produces the most advantageous effects in conjunction with the employment of mercury, in arresting changes of structure in the organ. The general powers are to be supported under such a treatment, by a nutricious and rather general diet.

How far can it be advantageous to apply stimulants to the eye in cases of strumous ophthalmia? They have been much employed; and these are the cases in which they have been most strongly recommended. I confess that I have the same doubts respecting their utility in strumous ophthalmia as I have expressed in the treatment of the common form of inflammation. If the nitrate of silver had any power of correcting the morbid irritability of the organ, we should gladly avail ourselves of it in these cases. But I believe that the intolerance of light will be much more effectually and speedily removed by the means I have mentioned, than by any local application. The room should be darkened when the intolerance is severe, and the patient should wear a light green shade. At any rate, you would not think of using local stimuli until the general treatment had been tried, and I believe that will be found to answer the purpose best. If you should meet with any cases in which this treat-

ment should fail, then you may try a weak solution of the nitrate of silver, putting a few drops into the eye two or three times a day. In cases of spreading ulcer and great irritability, you may employ the solution of nitrate of silver, or of the composition I before described, the lapis divinus. The vinum opii is of no service. I can only say, with regard to the great variety of stimulants and astringents that have been recommended, that I have never seen much good done by them. The *crusta lactea*, which is very troublesome to the child, and annoying to the parents and friends, may in general be greatly benefited by the use of the oxyd of zinc lotion; a drachm of the oxyd to an ounce of water is about the proportion in which it is used. The morbid surface should be well cleaned with tepid water two or three times in the day, and the wash may then be applied to the part. A solution of the corrosive sublimate, a grain to six ounces of water, may be used as a lotion with advantage. No means of this kind should be resorted to, until after the use of purgatives, and when the tongue is clean. A sudden repulsion of the eruption may aggravate the ophthalmic inflammation. Children are often very much disfigured by the incrustations; but there is one consolation, the scales never leave any cicatrices or pits in the skin, and the personal appearance is uninjured even in the worst cases.

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# LECTURES

ON THE

THEORY AND PRACTICE OF PHYSIC,

BY DR. CLUTTERBUCK.

*Theatre, General Dispensary, Aldersgate-street.*

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## LECTURE XX.

Gentlemen,

I HAVE, in this Lecture, to speak

*Of Bloodletting, as a remedy for Inflammation.*

There is no remedy which will bear a comparison with this, in point of efficacy; and none which, under certain circumstances, can be so little dispensed with. You are not, however, to imagine that it is always successful, or always proper. When used with the greatest judgment, it will sometimes fail; while there are many circumstances of inflammation to which it is not adapted, and in which it may even prove injurious. It is much to be wished that we knew the way in which *bloodletting* effects its purpose, in the cure of inflammation; for this knowledge, if it could be obtained, would greatly assist us in the application of it. The subject, however, is difficult, and I am not sure that it is sufficiently understood. You are not to suppose, as ignorant people often appear to do, that we bleed a patient in order to draw off the bad blood he may have in his veins. Nor is there much better foundation, I believe, for the opinion, that it is useful in any case, by merely lessening the quantity of blood in the system, upon the supposition that there is an over-fulness of the vessels, or what is termed *plethora*. Again, it is not simply by inducing weakness that the object is attained; for then the good effect would be more in proportion to the quantity of blood lost, than is found to be the case. A small quantity of blood drawn in a certain way, often produces much greater advantage, than a large quantity differently taken. The relief experienced from *bloodletting* is sometimes so instantaneous, even while the blood is flowing, as not to admit of the supposition that it proceeds merely from the weakness occasioned by it. It seems more reasonable to believe, that the good effect is owing to the impression made on the general system, influencing its mode of acting; just as in cases of what are called *counter-irritation*, which I have before explained to you, and with which this appears in some degree analogous. If this be true, it must be desirable to take blood in that way which will make the greatest impression on the system, and at the least possible expense.

Now the more rapidly blood is taken away, the greater is the immediate effect produced by it; so that a very few ounces bursting suddenly, as it were, from the vessels, will affect the system more than treble the quantity when slowly drawn. If it be drawn faster than the blood vessels are disposed to contract, so that the sides of the vessels are not brought in contact with the blood, the circulation will necessarily be at a stand, and syncope or fainting ensue. Now the blood vessels contract more readily in some individuals than in others, and such persons do not so soon become faint from bleeding. This does not depend altogether upon the general strength, but upon other circumstances. When the system is in a febrile state of action, faint-

ing is not so likely to occur, because then the vessels are more disposed to contract. Hence it is, that patients more readily faint on the first bleeding (the general febrile action not being yet established) than on a repetition of it, although they have become actually weaker.

The effect of bloodletting may be either *temporary* or *permanent*; depending upon the rapidity with which the blood is drawn, and the quantity taken. The *temporary* effect is according to the rapidity with which the blood is drawn; a very few ounces taken quickly from a large orifice, especially if the patient be in the erect posture, will produce great sense of weakness, and perhaps absolute fainting. These effects, however, soon cease; that is, as soon as the vessels have time to contract themselves, and the circulation is restored. If the blood be taken slowly, and in the recumbent posture, so as to avoid fainting, the weakness induced by it is according to the quantity of blood lost; and the effect is in this case *permanent*.

Now sometimes it is most desirable to produce a great *temporary* effect, without inducing lasting weakness. In diseases of great violence, where it is an object to suspend as quickly as possible the progress of the disease, rapid bloodletting is to be preferred, and in the erect position, in order to make a sudden and powerful impression on the system. But if the effect is required to be lasting rather than sudden, then it is better to take away the blood slowly, and in the recumbent posture; as it is not otherwise easy to obtain as large a quantity of blood, as may be necessary for the cure. There is another reason why it is in general not advisable to take away blood very rapidly, which is, that the occurrence of syncope is both distressing to the patient, and alarming to the by-standers; and it becomes more difficult in consequence, to repeat the bleeding as often as the case may require. It is sometimes proper, in recent and violent inflammation, to go on till the pulse flags or is otherwise altered, and till signs of approaching syncope appear. But this requires to be done with caution; for some persons bear the loss of a very large quantity of blood, and such as might even prove dangerous, before they become faint.

The chief circumstances to be attended to, as regulating the use of bloodletting in inflammation, are the following: the *degree* and *duration* of the disease; the *age* and *habit* of the patient, in regard to strength and weakness; also the state of the *pulse*; the *nature of the part affected*; and, lastly, the *nature of the inflammation itself*, as being *common* or *specific*.

The *extent* to which bloodletting is to be carried, in respect to *quantity* and *repetition*, is also a point of great importance, and is governed by its effects on the disease, as being favourable or otherwise; by the state of the blood drawn, and other circumstances; all of which it is necessary that I should notice, in order that you may be able to apply the remedy with safety, and with the greatest advantage.

That the use of bloodletting will be governed in some measure by the *degree* or violence of the disease, must be very obvious to you. Generally speaking, the more violent the inflammation, the greater call there is for this, and other active remedies. But even in slight cases, when the disease is seated in important organs, especially those in which there is a tendency to disorganization, bleeding may be advisable; upon the principle, that "the safest practice is the best," and because the slightest degree of inflammation in such parts is capable, by continuance, of injuring the structure. Many fatal terminations of disease in the lungs might be prevented by acting upon this maxim.

The *stage* of the disease is a point of great consequence. In all cases of inflammation, bloodletting is more efficacious, the earlier it is resorted to; so that it commonly becomes less and less effectual, the longer it is delayed; till at last it may be wholly inadmissible. This applies more strongly to the case of proper or *idiopathic* fever, than perhaps any other. At the outset of this disease, bloodletting is unequivocally, and almost invariably, safe and effectual; while, in an advanced stage of the disease, it requires to be employed, if at all, with great caution.

The *habit* of the patient in regard to strength and weakness, will doubtless have much influence on the use of bloodletting as a remedy for inflammation, though not in the way and to the extent that are commonly supposed. There is no difficulty in regard to strong subjects; but a very unfounded prejudice exists against bloodletting in weak ones. I can venture to assure you, from much experience, that bleeding is frequently as necessary, and as safe too, in weak as in strong subjects, when the nature of the case calls for it; the difference is merely in regard to quantity. You are to bear in mind, that the loss of three or four ounces of blood in a weak subject, is equal to a pound in a strong one. With this precaution you have nothing to fear.

Again, neither infancy nor old age are in themselves opposed to bloodletting; in infants, on the contrary, there is, generally speaking, a greater necessity for it, on account of the greater rapidity with which inflammation in such subjects proceeds to disorganization and death. There is nothing so mistaken, as the considering infancy a state of weakness; for at this period, all the vital actions are performed with the greatest energy. Great caution, however, is necessary in regard to quantity—ounces being nearly equivalent to pounds in adults. In old age, likewise, bleeding is frequently necessary in cases of inflammation, though it does not require to be so promptly administered; whilst it must be employed only to a moderate extent. I knew an old lady considerably more than ninety years of age, who on account of frequent returns of vertigo, was in the habit of being bled every six or eight weeks, for some years before her death.

You ought to understand well how far the *pulse* is to be relied upon as a guide to bloodletting in inflammation, a point upon which a good deal of error exists.

A very *frequent* pulse in inflammation, must be taken in conjunction with other circumstances, in order to justify bleeding. Such a state of pulse is more likely to occur in weak, than in strong subjects; and, therefore, is prohibitory, at least of bleeding to a large extent. In inflammation of the heart, however, the pulse is very frequent, even in strong subjects. A *slow* pulse generally indicates oppression of the brain. This oppression may be owing to recent and active inflammation of the organ, producing arterial distention, and consequent interrupted circulation, in the brain. In this case bloodletting is generally indispensable. But the oppression may likewise be owing to extravasation of blood, or serous accumulation, the consequence perhaps of inflammation, though not of the inflammation itself, which may have subsided, the effect only remaining. In these cases, slowness of pulse would be no reason for bloodletting, which could not, in the nature of things, be productive of any immediate relief.

A *strong* pulse generally justifies bleeding, where the case is such as to require it, at least it may be done with safety, though it may not be always advisable. But a *weak* pulse does not necessarily prohibit this evacuation, if there should be an urgent call for it in the nature of the symptoms. You are to recollect also, what I before stated when speaking of the pulse, namely, that a small obscure pulse is not always to be taken as a sign of absolute weakness; for, in many inflammations, the pulse is generally in this state; as in inflammation of the heart more especially. It is often so likewise in the beginning of other inflammations, when bloodletting is the most useful; and in these cases, the pulse *rises*, as it is termed, after bleeding, and when the disease is further advanced. In a great number of cases of inflammation, the pulse is scarcely altered from the natural state, and yet bloodletting may be highly necessary. We are to take our indications, therefore, more from the other circumstances of the disease, than from the pulse alone, which is very liable to deceive us. When, in any case, where the pulse is small and weak, you find upon inquiry that the patient a few days before, was in the possession of a tolerable share of general strength, and that no large evacuation, or other cause of weakness, has taken place in the interval; you may conclude that such a state of pulse is merely the effect of the disease, and is no argument against bleeding, if otherwise necessary. On the other hand, fulness and even strength of pulse, are not always a sufficient reason for bleeding; as in the case of acute rheumatism, to which I shall presently allude.

The *appearance of the tongue* is, in most cases, a very good guide to bloodletting. In almost every case where the tongue is much coated, and at the same time dry, bloodletting may be safely and usefully practised; provided due attention is paid to quantity, and the strength of the patient at the time. This state of the tongue is always indicative of active inflammation, such as will very generally bear abstraction of blood, although the quantity proper to be taken at once may sometimes not exceed two or three ounces. The advantages derivable from small and repeated bleeding, appear to me to be neither generally known, nor sufficiently appreciated; and, therefore, I wish to impress you with the subject.

The *nature of the part affected* has a greater influence in regard to bloodletting than you might at first suppose. This remedy is more prompt and efficacious in inflammation of some parts, than of others. It is most useful, perhaps, in diseases of the chest, and least so in ligamentous inflammation, as in rheumatism. The difference here, indeed, is very striking. In the most acute form of rheumatism, that which is commonly termed *rheumatic fever*, the indications for bleeding are of the strongest kind. There is more pain, more febrile heat,

more strength and fulness of pulse, and a more inflammatory appearance of the blood, than in any other disease. Yet, experience proves that bleeding, though often useful and even necessary, is far less efficacious than in other inflammations; and, when carried to a great length, seems even adverse to the cure. In like manner bleeding appears to be more useful in inflammation of *serous* than of *mucous* membranes. It is less necessary also in the latter, as there is a sort of natural cure to these inflammations, namely, the increased secretion, and consequent discharge from the inflamed membrane; as in cases of *catarrh*, *diarhœa*, and the like. But there is certainly no foundation for the notion entertained by some, that inflammation of the mucous membrane is of so *depressing* a nature, in regard to the general system, as not to admit of loss of blood: on the contrary, you will often find it necessary in these cases, when the inflammation is very violent or extensive.

The *nature of the inflammation* itself, as being of a *common* or *specific* kind, as we call it, is always to be taken into account. In the *specific* inflammations, bleeding is seldom more than palliative; and it is not often required, even for this purpose.

The *extent* to which bloodletting is to be carried, as to *quantity* and *repetition*, is subject to great variety; determinable by the state of the disease—the effects of the remedy—the state of the blood drawn—and various other circumstances. It is impossible to lay down an absolute rule with regard to quantity: the effects being so different under different circumstances. In persons of tolerable general strength, and at the middle periods of life, the quantity may vary from six or eight ounces, to twenty or thirty, according to the violence and danger of the disease. The quantity should be less, the longer the disease has subsisted. In children, from 2, or 3, to 6 or 8 months, from one to three ounces may be considered as the safe limits. In old subjects, on the other hand, it is seldom proper to take more than eight or ten ounces; and this quantity, may be even considered large. Taking these points as your guide; you will easily fill up the outline, so as to adapt your practice to the circumstances of the case. In regard to repetition, this is governed chiefly by the continuance of the disease; thus it is often necessary to resort to bloodletting a great number of times—that is, either till the object is accomplished, or till it appears improper to proceed further; a point that is to be determined chiefly by the strength of the patient—and this again, by the state of the pulse. The interval to be allowed between the different bleedings, is governed chiefly by the part affected, and the known disposition of the disease, to proceed rapidly or otherwise. When the small intestines, for example, are suffering from active inflammation, six hours can hardly be allowed to elapse, without a recurrence to bloodletting, if the disease continues; but in most other inflammations, a longer interval may be allowed.

The whole quantity of blood required to be drawn in any particular case, and which can be taken with safety, it is difficult and hardly possible to assign. In some cases of pneumonia, one hundred, a hundred and fifty, or even two hundred ounces have been taken in the space of a few days; and less would not have sufficed for the cure; but you are always to consider, what other means you have in your power, to assist the bleeding, so as to make this the less necessary.

The *appearance of the blood*, when drawn, is an uncertain guide, with respect to repetition. The absence of the inflammatory crust, affords no decisive objection to further bleeding—nor is the presence of it a sufficient reason for its further employment. It is by no means necessary to bleed, till the inflammatory character disappears from the blood. It is sufficient, in general, that the symptoms give way—and even if they should not, as is sometimes the case, we may be obliged from mere weakness to desist: a great disproportion between the crassamentum and serum, will in some degree serve us as a guide. A large quantity of crassamentum, may be so far taken as an indication of general strength, as to justify even large bleeding, where the circumstances of the disease appear to demand it; and, on the other hand, a very small quantity of crassamentum, floating as it were in a large portion of serum, should make you cautious in regard to further bloodletting; at all events, such a state of the blood, will allow only of a sparing quantity to be taken. You are not to believe, however, with the vulgar, that in such cases the blood is turned to water—for you will find that the serum, when examined by the proper tests, contains an ample quantity of albuminous matter.

More attention is paid to the firmness of the crassamenium, than is requisite. In general, where this is loose and easily broken, it is taken as an indication of a degree of weakness that will not bear

bloodletting. This, however, is not a general rule; for in simple idiopathic fever, the blood is always in this state, even where the subject is strong; and yet I know from experience, that bleeding in such cases may be safely and usefully practised; provided it is done at a proper period, that is, very early in the disease.

The *pulse* is to be carefully watched, where it becomes necessary to take blood repeatedly, and to a great extent; for it is by this sign, principally, that we determine the length to which venesection can be safely carried. The pulse becomes smaller and weaker in proportion as the loss of blood is carried further; and there is a point beyond which it is not prudent to go. Unfortunately, there are no means of determining this point with any precision. We cannot measure minute degrees of strength and fulness of pulse, so as to be able to communicate our sentiments upon these points to others. This kind of knowledge must be acquired chiefly from observation and experience. In judging of the general strength, you must not trust wholly to the pulse, but inquire into other circumstances indicative of strength and weakness; such as the feelings of the patient, his various movements, and even the expression of his countenance.

Highly as bloodletting is to be prized as a remedy for inflammation under a variety of circumstances, it is nevertheless necessary you should use it with caution, as knowing that, when misapplied, it is capable of doing much harm. One of the ill effects ascribed to it, however, and which has deterred many from employing it where it is obviously wanted, is its supposed tendency to induce dropsy, or, as it is often expressed, to occasion *effusion*. Thus it is said, if you bleed to too great an extent in pneumonia, you will give rise to *hydrothorax*, or effusion in the chest. But the serous accumulation in this case, is the effect of the inflammation, and not of the bleeding, which, by checking the inflammation, tends rather to prevent the effusion, than to cause it. A large loss of blood is occasionally followed by slight œdematous swelling of the feet and ancles, but never, as far as I have seen, by general dropsy, nor by effusion into cavities as the mere effect of the bleeding.

Blood may be drawn in different ways; as 1st. from some large vein (*phlebotomy* or *venesection*); 2. From arteries (*arteriotomy*); 3. By leeches; and, 4. By scarification, with or without the aid of cupping-glasses. These different modes of drawing blood, are more or less useful, according to circumstances.

*Venesection* is, upon the whole, greatly preferable to the others, as being more certain and determined, easily practised in most cases, and decidedly more efficacious; as in this way a more sudden and powerful impression is made upon the system, and the disease in consequence more influenced, than by either of the other modes mentioned. *Arteriotomy*, on the contrary, is difficult to be executed, with precision and certainty, so as to obtain a determined quantity of blood in a given time. There are few parts where it can be safely practised, or at least without considerable inconvenience; and it often requires extensive pressure to be made, in order to restrain the bleeding afterwards: while, even if it could be so done as to ensure the obtaining the requisite quantity of blood in a given time, (which is far from being always the case,) it has no peculiar advantages, or beneficial influence over the disease, to compensate for the inconveniences I have mentioned.

The application of *leeches* is of all, the least efficacious mode of taking blood; as, from the slow way in which the blood flows, the impression made either on the general system or on the disease, is not in proportion to the quantity of blood lost. The body altogether may be greatly weakened by the successive application of a great number of leeches, without any beneficial impression being made on the disease, as I have repeatedly seen: while, in these very cases, an almost immediate stop has been put to the disease afterwards, by the sudden abstraction of a very few ounces of blood from a vein. It appears to me to be an error to suppose, that the system will not bear an equal loss of blood by venesection, as by leeches; the effect ultimately, in both cases being in proportion to the quantity of blood lost. When bleeding is called for at a time that the system is greatly weakened, as is sometimes the case, the blood should be drawn so as to produce the greatest effect at the least expense of blood, and this undoubtedly is by venesection; which, however, in such cases, had better be done so as to avoid actual fainting. Leeches have another inconvenience, namely, that it is difficult to estimate the quantity of blood lost. What I have now said in regard to leeches, applies to the case of children, as much as to adults; and you will find it much less difficult to bleed children in the arm or neck, than is commonly sup-

posed; while it is a far more prompt and efficacious mode of giving relief.

The division of the vessels of the inflamed part by puncture or scarification, is undoubtedly often useful; but this belongs rather to the *local*, than the *general* treatment of inflammation. *Scarification with cupping-glasses*, near to the part affected, is a useful mode of drawing blood in many cases, but upon the whole much inferior to venesection, for the reasons I have just stated in regard to leeches. Cupping, possibly, may have some advantage, as producing a kind of *counter irritation*. But in this respect, *dry cupping*, as it is called, would probably have an equally good effect: this remedy (dry cupping) is, I think, more neglected in modern practice than it deserves.

It was formerly supposed, that the taking blood from one part of the body rather than another, was a point of some importance. The hottest disputes at one time existed among physicians, as to whether in cases of pleurisy, the blood should be taken from the arm on the side affected, or from the opposite one. And even at present it is considered, by our continental neighbours, far more serviceable to bleed in the foot in certain diseases, than from the arm. I am not prepared to say that there may not be some foundation for this; but the question is hardly possible to be decided. In this country, we are in the habit of taking away blood as near as possible to the part affected; but there may be as little ground for this preference as for the other.

I have now explained to you, as far as I am able, the chief circumstances which regulate and modify the use of bloodletting in inflammation; and, I trust, you will see the necessity of using it with caution. I may repeat, that it is in no case an absolute or certain remedy; nor does it remove the disease in a direct way. It only gives to it the disposition to subside, and that only under certain circumstances, which you ought, as far as possible, to make yourselves acquainted with.

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## REVIEW.

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*A Practical Treatise on the Arterial System, intended to illustrate the importance of studying the Anastomoses, in reference to the new Operation for Aneurism, and the Surgical Treatment of Hæmorrhage.* By THOMAS TURNER, Member of the Royal College of Surgeons. 8vo. pp. 194. Longman and Co., London; Aston, Manchester. 1825.

As aneurisms, arteries, and anastomoses, present, in our day, but scanty materials for an original volume, we think the present work might have formed a part of the "Outlines of a Medico-Chirurgical Education," which the author published about two years ago.* In the first section, he describes the structure, functions, and diseases of the arterial system; in the second, the usual origin and course of the main arteries of the body, with the distribution and terminations of their branches; and, in his last, the anastomoses of arteries are considered in relation to the common operation for aneurism and the surgical treatment of hæmorrhage. With respect to the treatment of aneurism, he endeavours to prove—

1st. That (with the exception of the aorta, when it is obstructed above the lumbar branches) if the main vessel be obliterated, the anastomosing circulation is always sufficient to support the life of the part.

2dly. That more is to be feared of too many anastomosing branches than of few.

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* Outlines of a System of Medico-Chirurgical Education, containing illustrations of the application of Anatomy, Physiology, and other Sciences to the principal practical points in Medicine and Surgery. 8vo. 1824.—See THE LANCET, Vol. V. p. 202.

3dly. That the operation of tying the arterial trunk at a sufficient distance from an aneurism to ensure a sound condition of the vessel, will generally be effectual.

4thly. That failures may be attributed to the sac being fed from above by inosculating branches, or from below by the recurrent circulation; to a large coagulum, or extensive suppuration.

5thly. That to obviate the first cause of failure, the anastomoses must be studied, and that the blood should be diverted from the aneurismal swelling by moderate pressure.

6thly. That when the aneurism is circumscribed, of a very large size, and contains much coagulum, mixed or not with pus, besides tying the artery, the sac should be opened at its most dependent part, and its contents evacuated, so as to remove a fertile source of irritation.

7thly. That when the aneurism is of the diffused kind, or the result of a ruptured vessel, and the surgeon is called early, he should cut down on the artery, remove the coagulum, and secure the vessel with two ligatures.

8thly. That when diffused, of considerable magnitude, and of long standing, it is probable that the wound in the artery is partly or wholly obstructed; and that a ligature on the main trunk will so far break the force of the current as to prevent further mischief.

9thly. That after having tied the main trunk, it is generally advisable to remove the coagulum, especially if a suppurative process have commenced in the sac, and the soft parts forming its boundaries are much disorganised.

*Lastly.* That in cases of hæmorrhage, two ligatures on the wounded vessel are necessary, or that one has rarely sufficed.

Upon most of these points there can be no difference of opinion; we therefore proceed to the author's observations on the treatment of wounded arteries.

"When," says he, "a small artery is wounded, natural means alone will suffice to put a stop to the flow of blood. The first effect, if a small vessel is cut across, is a retraction, within the cellular membrane enveloping it; the blood is entangled, coagulates, and the bleeding is checked. If the artery be simply punctured, the retraction does not take place, but still the coagulation of the effused blood suppresses the hæmorrhage; but in the former case the effect is more immediate and certain than in the latter. The permanent security against the return of bleeding, is accomplished by the wounded artery becoming inflamed, and the aperture closed by the adhesive inflammation. When a main artery of any of the internal organs is injured or gives way, we have to apprehend fatal consequences. A wound of the pulmonary artery, aorta, arteria innominata, common carotid, common iliac, and internal and external iliacs, will prove fatal; but a hæmorrhage from other arteries may, in a general way, be commanded by the ligature; and if inferior in size to the temporal, commonly by compression only.

On studying the anastomoses, we must naturally seek to determine the question, whether the ligature should be applied to the main trunk,—at a distance from the wound,—to the wounded extremity nearest the heart,—or both to the upper and lower extremity of the vessel? If our judgment were alone biassed by a knowledge of the anastomoses, we should not hesitate to subscribe to the opinion of Mr. Hodgson, that in every instance in which an artery of considerable size is wounded, each extremity of the vessel should be tied as near as possible to the wound in its coats, as the anastomoses in all parts of the body are so extensive as to furnish a supply of blood, which may pass through the wounded extremity of the wounded vessel in a sufficient stream, to produce an alarming, and, in some instances, a fatal hæmorrhage.

Mr. Hodgson adds two cases, one communicated to him by Mr. Lawrence, in which the bleeding from the lower extremity of a divided brachial artery was sufficient to cause the death of the patient; and another by Mr. Henry Earle, where a punctured wound received midway between the elbow and wrist, was treated by two ligatures on the brachial artery in the middle of the arm; but on the eighth day a copious bleeding took place from the wound in the fore-arm, and it was

found necessary to expose the vessel, (the radial artery,) and to apply a ligature at each extremity.

The principle of applying two ligatures at the wounded part, appears admissible as a general one; and I have no hesitation in saying, that it should always be adopted when a vessel of such a size is wounded, as to give rise to a serious hæmorrhage. But it now and then happens, that there is considerable difficulty in reaching the wounded portion of the vessel, and then the following practice may be attempted; and if the artery be not large, will be certain to succeed. In a wound of the palmar or plantar arteries, for example, it is often difficult to expose the vessel; the treatment in this case, provided compression fails, must consist in tying the trunk which supplies the wounded branch, and using firm pressure on the injured part."—pp. 36—39.

To impress on the mind of the student, the inefficacy of tying the main artery at a distance from the wound, and that the application of a ligature to the upper portion *only* is not sufficient, the author adds another case from Roux's "Parallelle." A femoral artery, which had been wounded a little below the middle of the thigh, was tied at the lower part of the inguinal space. On the 10th day after the operation, a hæmorrhage occurred, when it was again tied below the origin of the profunda, and the hæmorrhage, which came from the part nearer the heart, immediately ceased; but on the following day a considerable quantity of blood escaped by the inferior orifice. The artery was now laid bare and tied below the wound, after which the bleeding did not recur.

Mr. Charles Bell, in the second volume of his "Operative Surgery," mentions the case of a man who had received a deep wound between the fore finger and thumb, by which, much blood was lost. The artery being tied by the side of the extensor tendons of the thumb, the bleeding stopped, but recurring, a compress was applied, and the patient did well. Thus, says the author,

"When a man is bleeding from an artery of the hand, wrist, or foot, tying the trunk of the artery, only diminishes the impulse, and does not entirely stop the flow of blood which comes round by the free inosculations. But the direct course of the blood being interrupted our dressing, is sufficient to stop the force of the hæmorrhage, by the anastomosing vessels. If the artery be not taken up, a sponge must be thrust deep into the wound, and a tedious sore is the consequence; but if the main supply be stopped, the lips of the wound can be brought together, and the compress put over the integuments, [not into the flesh,] and the wound heals by the first intention."—pp. 42.

This practice is commonly sufficient, without tying the artery in the hand, which is a somewhat difficult operation. After speaking of the high division of the brachial artery, the author mentions two very extraordinary origins of the ulnar artery, which are now in the possession of Mr. Ransome, a surgeon to the Manchester Infirmary. In one instance, it arises from the infra-scapular branch which, though of unusual size, is sent off by the axillary trunk, in the usual way. From the infra-scapular branch a large artery runs down the arm on the inner side of the brachial, and in some part of its course, immediately in contact with it. At the bend of the arm it is united to the brachial, and then proceeds as the proper ulnar artery. It is not merely an union by contiguity, but an absolute coalition, the ulnar being much larger in the fore-arm, than in the arm. This unusual branch furnishes the deep branches, and ramus anastomoticus; the continued trunk of the axillary giving off only two or three very small muscular branches. The variety is very uncommon, but Mr. Green, in a letter to the author, states, that he has met with one instance of it. Dr. Barclay says, that this double appearance is often occasioned by a branch *arising from the* humeral artery, near the axilla, or at

east high in the region of the humerus, and which, after running in a parallel direction, enters the humeral artery, or some of its branches, near the bend of the arm. In four preparations this branch entered the radial artery; in three of them opposite the bend of the arm; in the fourth, some inches beyond it.

In another preparation, the author found the ulnar artery arising from the subclavian, and in the same subject, the interosseal branch, from the radial trunk instead of the ulnar.

Speaking of a high division of the brachial artery, and the operation for aneurism, Mr. Hodgson says, if there be two arteries, it will be doubtful by which of them the tumour is supplied, and therefore recommends that one of them should be compressed. If the pulsation in the tumour cease, it is evident that it is supplied by the compressed vessel; if not, by the other branch upon which the ligature must be applied. He prefers this operation to that of tying both arteries. We must, however, agree with our author and Mr. Harrison, that this expedient will not answer in every case, for sometimes two or three cross branches unite these arteries as they descend the arm, which will pour a quantity of blood into the aneurism, and keep up a degree of pulsation, sufficient at least to deceive us. The only objection that can be urged against tying both arteries, is the effect which it might have on the after circulation, but as the anastomosing branches are fully capable of undertaking that, we have nothing to fear. After clearly explaining the anastomoses between the radial, ulnar and interosseous branches, the author thus speaks of them with reference to the treatment of aneurism and hæmorrhage—we give the extract as a specimen of his style and manner of treating the subject. He says,

"Aneurism sometimes forms in the course of one of the arteries of the forearm, but it more frequently occurs at the wrist or near it, than at any other part. The recurrent circulation in those cases will prevent success, if the ligature be applied to the vessel at any great distance from the aneurismal sac; experience has proved this, and observation has convinced me, that the operation may fail when the ligature is applied at no great distance from the disease. About four years ago, I saw, with Mr. Ainsworth, one of the surgeons of our Infirmary, [Manchester,] a case of aneurism of the radial artery, situated in the vessel. The patient, who was nearly 70 years of age, had had a small tumour in this situation for some time, and at length showed it to a surgeon who pronounced it to be an aneurism. When Mr. Ainsworth saw it he proposed to perform an operation, to which the patient consented. Reasoning on the result of tying the artery in other cases a little above the aneurismal sac, and from the diminution of pulsation in the tumour when the artery was compressed at the wrist, it was thought justifiable in the present instance to cut down on the radial artery at the carpus, and to surround the vessel with a thread; this, however, did not destroy the pulsation in the tumour, and it became in a few minutes nearly as distinct as it was before the radial artery was tied. Finding that the sac was thus fed by anastomoses, and so abundantly as to render the success of the operation too doubtful, it was immediately resolved to tie the ulnar trunk, on doing which all pulsation ceased; but in a little time a faint tremulous motion was perceptible in the aneurismal swelling, which however gradually went off, and the disease was cured. This is a very instructive case; it shows that when an aneurism is situated in either of the arteries of the hand, that the operation of cutting off the main supply of blood by tying the trunk of the diseased artery, is not always sufficient; that the inosculations are so free as to feed the sac in a way that would prevent the coagulation of the blood which enters it, and consequently the success of the operation.

The question now to be asked is, as to whether in such cases, it is even safe to trust to one ligature on the trunk of the vessel near to the aneurism? Whether it is preferable to open the aneurismal sac, and apply a ligature at each extremity? Or whether it is better to tie both the radial and ulnar trunks? I think one ligature can never succeed; that the operation of opening the sac and applying two ligatures is a difficult and dangerous

operation, where the sac is bound down by tendinous structures, as in this instance; and therefore, that tying both the radial and ulnar trunks, is the safest and most certain practice. That there can be no risk as to the after-circulation, the case above cited proves beyond all dispute; for the interosseal arteries and their communications with the branches of the two main trunks, are fully adequate to the nourishment of the hand.

Scarpa mentions, that although the Hunterian operation* is wonderfully efficacious in the cure of aneurism of the bend of the arm; of that in the ham, and at the upper part of the calf of the leg it is not equally effectual in the cure of aneurism on the back or palm of the hand; in the dorsum or sole of the foot; and for the reason which has been explained, viz. the free inosculations of the extreme branches of the trunks of the extremities. He recommends as the best practice in these cases, to tie the artery above and below the disease: but when that cannot be done, owing to the situation of the tumour, a ligature should be passed around the artery which supplies it, and thus having stopped one of the currents of blood which distended the aneurismal sac, the other might be constrained by compression, without the necessity of tying the trunk.

The circumstance connected with the situation of the aneurism in the above case, contra-indicated the first measure; and with respect to the second, as the difficulty of maintaining a sufficient degree of pressure on the ulnar artery, the length of time necessary for the absorption of the aneurismal tumour in an old subject would have been great, and the operation extremely painful. I think it very questionable whether Scarpa's recommendation is preferable to the method adopted. Waiving the difficulty and pain, it is more than probable that by such means the calibre of the ulnar artery would not have been obliterated; and if not, there would have been some danger, on the pressure being discontinued, of a recurrence of the disease.

With respect to the treatment of hæmorrhage, it is clear, that in order to suppress, in an effectual manner, a bleeding from a wound of either the radial or ulnar trunk, it is necessary to secure both ends of the vessel. If a wound were inflicted on the radial, about half way down the fore-arm, one ligature would not in a general way succeed in suppressing the hæmorrhage, nor would one suffice in a wound of the ulnar at the same part. In a wound of either of the branches of the palm of the hand, it is extremely difficult to find the artery at the bleeding point, in consequence of the cellular substance of the palmar fascia becoming filled with blood, and the structures of the palm are such as to render it extremely imprudent to make a random thrust with the needle.

Mr. Lizars, in the third part of the physiological and pathological observations which accompany his "System of Anatomical plates," advises, that when the artery is wounded in the palm of the hand, it should not be attempted to be secured there, in consequence of the proneness of the fascia palmaris to inflammation, but taken up, proximate to the carpus. He mentions the case of a patient who had the ulnar palmar arch wounded, and which was cut down on by the surgeon, but both the fascia and artery ulcerated, and amputation at the middle of the fore-arm, was the final result."—pp. 118—123.

In such cases, tying the ulnar artery "proximate to the carpus," will not of itself arrest the flow of blood; for the anastomoses of the radial and ulnar arteries are sufficient to carry on a recurrent circulation, unless pressure is made on the wound. Mr. John Bell says, that he never found it necessary to tie the lower end of the artery, which he thinks worth mentioning, as it is an exception to the rule commonly laid down; but, as Mr. Turner observes, he was evidently aware that one ligature was not sufficient, for he says, "a small piece of sponge must be put into the place," a practice which we cannot recommend, as it will cetainly produce much irritation and a suppurating wound.

These sections of the work which are devoted to the aorta, carotis communis subclavis et axillaris, are concluded by

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* The operation of tying the *brachial* artery above the aneurism, was successfully performed by Anelius more than a hundred years ago. See his *Suite de la nouvelle methode de guerir les fistules lacrimales*, 4to. Turin, 1713, and Heister's Surgery, article "Aneurism."—Ed.

certain practical deductions, which we shall submit to the student.

The following of the *aorta* :—

"1st. That the cases where the upper part of the aorta was found impervious after death, without a derangement of the general system, ought not to be admitted as evidence of the probable safety of passing a ligature about the superior portion of this main trunk.

2ndly. That the anastomoses can be demonstrated as not sufficient to continue the circulation, when the aorta is tied much above the origins of the lumbar arteries.

3dly. That the frequent success which has attended the operation of tying the aorta in the dog, at a point *between, or immediately above* the lumbar arteries, furnishes a presumptive proof, that the same might have a happy issue in the human subject. But,

*Lastly*, This measure is a desperate one, and only sanctionable when the case is beyond all the other resources of our art."—p. 59.

*Common carotid* :—

"1st. That modern experience has confirmed the opinion, that this vessel may be secured by ligature, without any permanent injury to the animal œconomy.

2dly. That the inosculations of the opposite external and internal carotids with each other, and with some of the branches of the subclavian, can furnish an adequate supply of blood to the neck, face, scalp, and brain. But,

3dly. It still remains an unsettled point, whether both common carotids can be obliterated *at the same time*, with any hope of success."—pp. 75, 76.

*Subclavian and axillary* :—

"1st. That the safety of tying the subclavian artery, under certain circumstances, has been proved by many successful cases.

2ndly. That when the ligature is applied on the humeral side of the scaleni muscles, the artery has given off its principal anastomosing vessels; we have therefore nothing to fear, as to a due transmission of blood to the upper extremity. But,

3dly. When the ligature is put on the vessel, at the tracheal side of the scaleni, it is anterior to the passing off of branches and in the vicinity of important parts; hence the operation is not free from danger."—pp. 100, 101.

Mr. Turner has given a clear description of the arterial system, as far as it relates to the treatment of aneurisms and hæmorrhages, of which there are many instructive cases, and the anastomoses of the arteries are well explained by two coloured plates. Upon these grounds we recommend the work to the notice of students.

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## FOREIGN DEPARTMENT.

### ARCHIVES GENERALES DE MEDICINE.

*The Public Health.—Report read by* M. VILLERME, *before the Royal Academy of Medicine, upon a series of Tables relative to the movement of the Population of the Twelve Districts of Paris, during the years* 1817, 18, 19, 20, and 21.

THE Tables here spoken of are constructed by M. Villot, and may be implicitly relied on for their accuracy. We have space to discuss them in no other than a medical point of view, and even here we must be brief.

In the five years comprehended in the work of M. Villot, the mean number of deaths, annually, in the different districts is as follows :

| | | |
|---|---|---|
| In the 2nd, quarter of the Chaussée d'Antin, &c., the proportion is.... | | 1 in 62 |
| In the 3d, Montmartre, &c. .... | | 1 in 60 |
| ,, 1st, Roule, Champs Elisées, &c..... | } | 1 in 58 |
| ,, 4th, St. Honore, Banque, &c. | | 1 in 58 |
| ,, 6th, St. Denis, Temple, &c. | | 1 in 54 |
| ,, 5th, Porte St. Martin, &c. | | 1 in 53 |
| ,, 7th, St. Avoie, Marche des Arcis, &c..... | } | 1 in 52 |
| ,, 11th, Luxembourg, Palais de Justice, &c. .. | } | 1 in 51 |
| ,, 10th, Monnaie, Faub. St. Germain ..... | } | 1 in 50 |
| ,, 9th, Isle St. Louis, Cite, &c. | | 1 in 44 |
| ,, 8th, St. Antoine, Marais, &c. | | 1 in 43 |
| ,, 12th, Jardin du Roi, St. Marcel, &c..... | } | 1 in 43 |

These very considerable differences do not depend on any accidental causes, for an examination, of each year individually, shows that they are quite constant. What then may those causes be which seem to assign to each district of Paris a particular degree of salubrity, which occasion in one the death of a 62nd part of

its inhabitants, and in another so large a proportion as a 43d?

The vicinity, or distance of the river, does not appear to exert any influence on the above result; neither can any thing be attributed to local exposure, nor to meteorological circumstances; neither any to the quality of the water employed in the various districts. A very general opinion is, that the more dense the population, the greater the mortality. This notion is founded on the fact of the deaths being proportionately more numerous in large than in small towns, and in small towns more numerous than in the country. The conclusion from this has been, that the agglomeration of houses, and the narrowness of streets are the causes of the insalubrity of towns, and that the crowding of men together corrupts the air which they breathe. The unanimous assent of medical men to this proposition obliges us to examine it with the greater care; and the comparison of the districts in which the inhabitants are, so to speak, piled upon each other, with those in which they are more scattered, will enable us to judge of its accuracy.

Now it appears that of the 5th district, there is one 0.46th of the whole superficies occupied by buildings; in the

| | |
|---|---|
| 8th,.....0.46 | 9th,..... 0.60 |
| 10th,.....0.53 | 6th,..... 0.62 |
| 3d,.....0.55 | 12th,..... 0.64 |
| 11th,.....0.55 | 2nd,..... 0.75 |
| 1st,.....0.57 | 7th,..... 0.82 |
| 4th,.....0.59 | |

These proportions, viewed in connexion with the mortality, show, that in the actual state of Paris, the width of the streets, size of the squares, gardens, &c. do not tend to promote the salubrity of several of the districts to the extent which is commonly supposed; because the districts in which the mortality is greatest, appear very generally to be those in which the streets, gardens, squares, &c. are the most extensive. The difference of the actual result from that which might have been expected, is still more remarkable when the mean superficies occupied by each individual in the different districts is compared with the mortality in each.

In the 1st, the mean extent of surface for each person is 64 square metres;

| | |
|---|---|
| In the 8th it is 46½ | In the 9th it is 16½ |
| — 12th — 37 | — 3d — 15½ |
| — 10th — 36½ | — 6th — 12½ |
| — 2d — 26½ | — 7th — 10¾ |
| — 11th — 21¾ | — 4th — 6¾ |
| — 5th — 18½ | |

Six metres and a half as the mean term of the space occupied by each individual, of a population of more than 46,000 souls! what crowding does not this suppose in the habitations of the poor who live in the 4th district? And if, in our calculation, we considered the number of flats, we should find that in all the districts the number of inhabitants corresponded to a much smaller superficies than that we have recognized; we should then have to reckon 3, 4, and even 5 individuals lodged one above another.

In placing the mortality by the side of the space allowed to each individual, we see that the mean annual proportion of deaths is as 1 to 51¼ in the districts where the said spaces are the largest, and as 1 to 53½ in the other districts. In short, we perceive at the opposite extremities of the table of the superficies corresponding to the lodgement of an individual, two districts in which the mortality is the same, and of the three districts in which the superficies is the most considerable, the 8th and 12th are those in which the maximum of deaths occurs.

Certainly such results could not have been predicated. We must conclude, then, that if the agglomeration of the population increases the mortality in any sensible manner, it is entirely owing, as indeed the instance of ships proclaims, to certain peculiar and adventitious conditions.

The cleanliness or filthiness, clothing, aliments, drinks, &c., are other conditions whose influence upon the public health we are much interested in ascertaining, and which, should certainly contribute to lengthen or to shorten life. Assuming that the dwellings which pay no tax, represent the habitations of the poor, and the others which do, those of the wealthy, or people in easy circumstances, we can ascertain with precision the average wealthiness of the inhabitants of each of the twelve districts; and as the nourishment, clothing, cleanliness, &c., are in the ratio of the fortune possessed, this may be assumed as representing the nature and quality of the food and raiment generally used in each district, with sufficient accuracy.

In the second district, the houses not taxed, are 0.07 of the whole, and the deaths, are 1 in 62.

| | | | |
|---|---|---|---|
| 3rd .... | 0.11 | .... | 60 |
| 1st .... | 0.11 | .... | 58 |
| 4th .... | 0.15 | .... | 58 |
| 11th.... | 0.19 | .... | 51 |
| 6th .... | 0.21 | .... | 54 |
| 5th .... | 0.22 | .... | 53 |
| 7th .... | 0.22 | .... | 52 |
| 10th.... | 0.23 | .... | 50 |
| 9th .... | 0.31 | .... | 44 |
| 8th .... | 0.32 | .... | 43 |
| 12th.... | 0.38 | .... | 43 |

A very remarkable result of this arrangement of the districts, according to the increase of the numbers of untaxed houses they contain, that is to say, of their paupers, is that they follow, with a single exception in the 11th, very nearly in the order of the increase of mortality.*

Wealth, consequently, or easy circumstances, and poverty, or misery are the principal causes (we should not say the only causes) to which the great differences that occur in the relative proportion of deaths in the several districts are to be attributed. To establish this truth is sufficient for us here; we will not follow it through all its bearings even in relation to medicine, still less will we consider it in a moral point of view, or in its connexions with the public economy.

As, however, there are two kinds of wealth—wealth which is unproductive, and wealth which is productive, it is an interesting matter to ascertain whether or not each species have a like beneficial influence upon the continuance of life. Now from documents which cannot lead into error, it appears, that the average annual mortality is, 1 in 55½, in the six districts which contain the greatest number of inhabitants who live on their incomes alone, whilst in the six districts where trade, and commerce generally, flourish the most, it is 1 in 57½. From this it is evident, that industry, and trade in general, advantage the public health more than unproductive riches.

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REVUE MEDICALE—CLINICAL SURGERY.

Cases observed in the surgical wards of La Pitié, by Ph. Ricord.

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*Melanosis of the Face extirpated, and consecutive scirrhous swelling successfully treated, without an operation.*

Cromtzi, a native of Belgrade, 66 years of age, had for more than a year been troubled with a carcinomatous tumour, situated upon the buccinator and masseter muscles of the left cheek. It extended upwards as high as the zygomatic arch, backwards to the posterior edge of the ascending ramus of the lower jaw bone, downwards to the level of the inferior edge of the body of this bone, and forwards to within half an inch of the left commissure of the lips, and over the major and minor zygomatic muscles. Bands were to be felt extending from the tumour into the fossa canina. The skin covering the tumour was of a purple colour, and this hue extended all around to about half an inch from its base. Beneath the angle of the jaw there were also two enlarged lymphatic glands, of the size of a very small walnut.

Although pretty moveable, this tumour still adhered to the muscles and subjacent tissues; it was hard and irregular, and caused lancinating pains of considerable intensity. It first appeared as a small tubercle, which speedily acquired the magnitude of the fist, its size when the patient entered the hospital.

In other respects the health of the patient was good, and on the 1st of Sept. M. Lisfranc proceeded to the operation in the following manner.

Two semi-lunar incisions included the tumour, and along with it a portion of skin all around, a quarter of an inch broad; for M. Lisfranc is always particularly solicitous to make his first incisions at as great a distance as possible from the immediate seat of the disease in cases of cancer, having observed that by so doing he guards more effectually against relapses. In dissecting out the tumour the parotid duct (which was completely exposed) and facial artery were avoided. The entire cancerous mass, as also a large quantity of diseased or suspicious looking cellular membrane, were removed.

On examination the tumour presented all the characters of the cancerous melanosis; it was a moderately consistent tissue, of a deep smoke colour, and stained paper precisely like Indian ink. Several cells contained a fluid of the colour and appearance of the liquor of the cuttle fish.

Two hours after the operation, a small artery was found to require tying. The edges of the wound were then brought as nearly into apposition as possible by means of adhesive plaster, and the whole was covered with a large compress spread with cerate.

On renewing the dressings next day, every thing looked well. The low diet and mucilaginous drink which had been prescribed the day before, were continued.

On the 3d, a slight erysipelatous inflammation appeared around the wound, probably occasioned by the adhesive straps. The use of these was omitted.

* The exception might be accounted for. Very many persons in the decline of life, retire from the other quarters of Paris, to that of the Luxembourg, or of the School of Medicine, which are comprised within the 11th district.

On the 4th, the submaxillary glands were swollen and painful; the pain was of the lancinating kind; the swelling extended around those glands which had in the first instance augmented in volume: 15 leeches, and emollient poultices were applied over them. On the 5th, there was some improvement. On the 6th, the day on which the quarter hospital allowance was ordered to be given, the patient committed, in addition, an excess in diet, and the swelling re-appeared; emollient applications continued. 7th. Twenty leeches applied. 8th. Swelling diminished; the wound suppurating kindly. 10th. Four leeches applied over the enlarged lymphatic glands; but the patient exceeding a second time in the article of food, the swelling appeared once more, and to a greater extent than ever, possessing all the region of the parotid gland, the masseter muscle, and the glands already affected. The lancinating pains became very severe: twenty leeches were ordered to the parts affected. The general health remained unbroken. By the 14th, the inflammation appeared to have passed to the chronic state; eight leeches were applied. 12th. Patient a little better; 14th. Eight leeches; 16th. Going on well; 17th. Inflammation again assailed the wound, and the pain and swelling of the surrounding parts increased; twenty leeches were applied to the angle of the lower jaw, which allayed the excitement, and brought all back to the chronic state. Nothing new was observed till the 25th, when eight leeches were applied. On the 30th, the patient seemed almost well; but on the 3d of October, the inflammatory disposition declared itself anew. The masseter became very hard, the skin over it very immoveable, the parotid region much tumified, and the lancinating pain augmented to intensity. Fifteen leeches were, therefore, applied on the 4th to the angle of the jaw. 5th. Symptoms diminished in severity; 6th. Eight leeches; 11th. Same application; 14th. Matters going on well; six leeches; the skin became slightly moveable, the inflammatory state declining. 15th. The swelling almost entirely dissipated, especially over the masseter, where it had been most considerable. The wound resulting from the operation almost cicatrized. 17th. The quarter allowance continued; the patient feels no pain, except on the application of strong pressure over the seat of the remaining tumefaction. 20th and 22d. Five and six leeches were ordered to the submaxillary lymphatic glands, which alone continued enlarged; on the 31st, these glands were free of all affection, and the patient left the hospital cured.

The cancerous melanosis is rarely observed to be developed in the cheek, and in so short a space of time. The success of the operation proves the propriety of recurring to this means, even when there are enlarged lymphatic glands surrounding the principal malady, it being understood, however, that these glands be properly treated afterwards.

In regard to consecutive inflammatory attacks of the wound, and those white schirrous enlargements of surrounding parts, to which relapses are so frequently owing, it is of the highest importance to distinguish the acute from the chronic state. In the first state, leeches ought to be employed in great numbers, when they act as antiphlogistic means; in the second, they are to be used a few at a time as discutients. It sometimes happens, however, that leeches applied in small numbers produce too great a degree of irritation, that in some instances they even induce erysipelatous inflammation, and great increase of tumefaction; in such a case, a simple emollient cataplasm will almost always be found sufficient to dissipate this increase of irritation in 24 or 48 hours, and not only the recently acquired additional increase of volume, but even a great part of that which the part possessed before the attack. In some individuals five or six leeches deplete, and act as antiphlogistics, and then a still smaller number must be used to obtain their exciting effects. In other persons again, even a large number of these insects act as excitants, in which event their antiphlogistic virtues are to be favoured, by recurring to venesection.

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*Case of Scirrhus of the Right Breast, developed subsequently to amputation of the Mamma for Cancer, and cured without an Operation.*

M. L. Kellermann, aged 36, of a good habit of body, had undergone an operation for cancer of the right breast, at Brussels, eighteen months before she came into the hospital of La Pitié.

When she entered on the 10th of October, 1825, the cicatrice resulting from the operation, extending almost transversely across the outer and fore part of the chest, was felt to be surrounded with clusters of enlarged glands, and indurations which possessed the great and little pectoral muscles, and extended from the clavicle over the whole of the upper and outer part of the right side of the chest, to the axilla, where many more enlarged glands were to be distinguished. The parts mentioned were half an inch above the

level of the rest of the chest. Violent lancinating pains deprived the patient even of a few minutes of continuous repose. These pains were very much increased by even the slightest pressure upon the seat of the tumefaction.

On the 11th, she was bled from the arm to the extent of two palettes and a half, and 25 leeches were applied to the diseased parts, which were then covered with emollient cataplasms. Rice soup was the diet prescribed. 12th. Pain somewhat abated; the patient had slept a little; twenty leeches; same diet. 13th. The motion of the heart increased suddenly and violently; and this state continuing on the 14th, the patient again lost two palettes of blood; a pill containing a grain of powder of belladonna, was also administered by the mouth, and 12 grains of digitalis *per anо* in a small quantity of fluid. The emollient cataplasms and same diet were continued. 15th. The violent action of the heart, and the pains of the breast, had declined; pressure now occasioned scarcely any uneasiness; and the enlargement seemed less considerable than before; the patient slept well; the same plan of treatment pursued. 17th. All was favourable, the pulse natural, and the breast free from pain; the belladonna, however, having produced some irritation of the stomach, was discontinued. The arm could now be moved more readily from the trunk, an act which used to cause acute suffering. 19th. No pain either in the epigastrium from the belladonna, or in the breast; 20 leeches ordered to the insertion of the pectoralis major, a point more sensible and more swollen than any other. 20th. Strong pressure now gives no pain; the swelling has subsided a little; 20 leeches to the margin of the arm-pit. Nov. 3d. Rather severe lancinating pains felt in the cicatrice, especially at its outer extremity, where an enlarged gland may be perceived, which is extremely painful on being touched. The arm cannot be moved from the body; 30 leeches were applied, and cloths dipped in a soothing decoction kept upon the parts. 22d. Twenty leeches to the anterior margin of the axilla, the seat of the hardest part of the swelling, and the cause of all the pain experienced during the movement of the arm. 24th. The pain and swelling were so inconsiderable, that the whole complaint seemed now to reside in a gland situated on the anterior margin of the axilla. The patient, however, had still several relapses, the palpitations of the heart were felt anew, but the same means always sufficed to allay unfavourable symptoms; the menstrual discharge, which had not appeared for some time, was supplied by the occasional application of a few leeches to the upper part of the thighs, a practice which was continued up to the 16th of January, when the discharge appeared, and flowed abundantly for seven days. From this moment the health of the patient appeared to be completely re-established; there were no darting pains in the breast, or arm-pit; the swelling disappeared entirely, and the motions of the arm became perfectly free.

This case, like the foregoing one, shows in the clearest possible manner, the great utility of antiphlogistic means, and among these, of leeches in particular, when well employed, in the treatment of such chronic enlargements, of such scirrhous affections, which so often terminate fatally.

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*Case of a very painful affection of the hairy Scalp, successfully treated by the removal of a flap of the skin.*

Herin, a sailor, 40 years of age, of a bilious temperament, was received into the surgical wards of La Pitié, Oct. 19.

On occasion of a public festival, this man had been struck by the stick of a rocket, which pierced his hat, burnt him slightly, and inflicted a wound on the integuments of the head, on the left side of the lambdoidal suture, half an inch in extent. This wound bled copiously at the time of receipt, but Herin, the next day, went to his work as usual, and the sore got speedily well.

Two months after, the patient had repeated attacks of tingling of the ears, of giddiness, and often felt as if he were about to fall. These symptoms were followed by a severe headach; the pain shot from the occiput towards the forehead and especially the left ear, of which the patient conceived he had some deep-seated affection. Herin now resolved to enter an Hospital. There on the day of his entry, he was bled twice, without any relief; next day sinapisms were used, and fifty leeches applied behind the ears, but in vain. He was next purged with the croton tiglium oil, which sent him twenty times to the close stool; he was kept for twenty days on the lowest diet; a seton was put into the neck, all without any good effect. The patient then grew desperate, and having provided himself with a razor to terminate his existence if he could procure no relief, he came to la Pitié to ask the advice of M. Lisfranc.

Examined with care, the following were the symptoms which he complained of: giddiness from time to time, intolerably severe but passing pains of the head,

which darted from the cicatrice towards the forehead and left ear. During the night the pain augmented to such a degree as entirely to banish sleep, and to render the life of the patient altogether insupportable. When the pain rose to intensity it was accompanied by throbbing in the head; this symptom could be produced at any time by merely pressing on the cicatrice. On shaving the head, the cicatrice was found to be eight lines in length and of a white colour; it presented no peculiarity either to the eye or the finger; it was only extremely sensible. The poor man could not endure the light. He said that since the receipt of the injury, he had had more frequent erections than usual; the pupils were natural, and no symptom of palsy had ever been observed.

Although M. L. was sufficiently clear in his diagnosis of the complaint, which he considered as a neuralgy, occasioned by the injury or incomplete division of some nervous branches, still as some deeper lesion might exist, such as depression of the internal table of the skull, a collection of purulent matter beneath it, or even a fungus of the dura mater, the treatment was commenced upon general principles, applicable to each and all of these cases. The patient was bled, had leeches applied at different times to the cicatrice, which was covered with cataplasms sprinkled with Sydenham's liquid laudanum; he was kept to low diet, took glysters, and the foot bath; but these various remedies did not alleviate his sufferings.

M. Lisfranc then determined to remove with the knife the cicatrice from whence all the pain emanated. This procedure he preferred to the simple section of the nerve, because, had he even succeeded in reaching the affected branch, the patient would still have been liable to a relapse; for it is amply proved that nerves when simply divided, unite again in a great number of cases, and, after their cicatrization, resume their physiological or pathological functions.

Two semi-elliptical incisions were therefore made to include a flap of skin, containing the whole cicatrice, three inches and a half in its long, and two inches and a half in its transverse diameter. The flap was then dissected out entire. The pericranium was healthy and no kind of tumour could be detected in the piece of integument removed. The patient was now relieved from his severe pains, and only suffered a little from the slight inflammation that now attacked the wound. With various slight ailments principally of an erysipelatous nature, the patient advanced gradually to convalescence. The wound resulting from the operation suppurated kindly; within six weeks after th operation it had healed, and the man was restored to complete health. As Herin remained attached to the hospital as a servant, and has continued well, there is no doubt of the perfect success with which the operation has been crowned.

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## THE FRENCH SYSTEM OF SURGICAL EDUCATION CONTRASTED WITH THE ENGLISH.

For the following accurate history of the French system of surgical education, we are indebted to Mr. BENNETT, who, for several years, taught anatomy in Paris, and is well qualified to write on the subject. To this grand, comprehensive, and harmonious system we have appended the NEW REGULATIONS that have just emanated from the "Surgical Star Chamber," in Lincoln's Inn Fields, which for infamy and groveling ignorance far surpass those of 1824. To these documents we entreat the earnest attention of our readers.

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In 1792, the National Convention decreed the suppression of all universities, colleges, corporations, &c., throughout France. However, before the expiration of two years, they found it indispensable to provide for the education of medical men, and in consequence Fourcroy and others were deputed to devise some system which, it was generally admitted, should be founded upon the principle, that "Medicine and Surgery were one and indivisible as the Republic." The Faculty of Medicine was shortly after organised, and formed the model upon which the other Faculties were subsequently constructed.

In Paris, we at present find the following Faculties, who have entrusted to them the business of education in their respective departments, viz.:—

The Faculty of Theology
The Faculty of Law
The Faculty of Medicine
The Faculty of Mathematical and Physical Sciences
The Faculty of Letters.

There are similar bodies on the same plan, and for the same purposes, in other great cities of France.

Now the re-union of *all* the Faculties of any particular city, Paris for example, constitutes the Academy of that city; and the re-union of all the Academies of France constitutes *The University of France.*

The great officers of the University are—a Grand Master, a Chancellor, a Treasurer, and a Council; they reside in Paris, and their jurisdiction extends over all the academies in France; the accounts, expenditures, &c., are regulated by them, and they constitute a Court of Appeal.

Each Faculty confers the degree of doctor at the expiration of four years' study, after several public examinations; but the Faculty of Sciences, and that of Letters, confer, in addition, the subordinate degrees of bachelor in sciences and bachelor in letters. To obtain these latter, a student has but to present himself for examination.

For the *bachelorship* in letters, he is examined in the classics, history, geography, and rhetoric; for the *bachelorship* in sciences, he is examined in the elements of mathematics, physics, natural history, chemistry, botany, &c.

Before a student is admitted to become a pupil at *any of the Faculties*, with the view of subsequently taking a degree, he must first possess the degrees of bachelor in sciences and bachelor in letters, whereby a good primary education is insured on his part.

We proceed to detail the system of education prescribed at the Faculty of Medicine:—

On presenting the degrees of bachelor in sciences and bachelor in letters, a student is admitted as pupil at the Faculty of Medicine, and thereon receives a ticket of admission, gratis, to all the courses of lectures delivered there.

In order to secure his presence, the student is obliged to register himself (take an *inscription*) four times a year, for which purpose books are kept open by the Secretary of the Faculty during fifteen days, at the commencement of each quarter The fact of his having inscribed himself sixteen times (which cannot be done in less than four years) entitles him ultimately to examination for degree.

A student is at liberty to attend any courses, public or private, he may deem useful; but there are certain courses in each year which it is indispensable he should follow at the Faculty, and his presence is insured by rolls being occasionally called over, and absence punished by forfeiture of inscriptions.

The following is the order prescribed for attendance on the lectures delivered at the Faculty of Medicine:—

## ATTENDANCE ON LECTURES.

| INSCRIPTIONS. | Winter Course. | Summer Course. |
|---|---|---|
| First Year, 1, 2, 3, 4. | Anatomy<br>Physiology<br>Chemistry. | Physics<br>Surgical Pathology<br>Botany. |
| Second Year, 5, 6, 7, 8. | Anatomy<br>Physiology<br>Operative Surgery. | Hygiène<br>Pharmacy<br>Surgical Pathology<br>Surgical Clinical Lectures. |
| Third Year, 9, 10, 11, 12. | Operative Surgery<br>Surgical Clinical Lectures. | Medical Pathology<br>Materia Medica<br>Medical Clinical Lectures. |
| Fourth Year, 13, 14, 15, 16. | Medical Clinical Lectures<br>History of Medicine. | Medical Pathology<br>Legal Medicine<br>Medical and Surgical Clinical Lectures.<br>Accouchmens. |

Having completed his sixteen inscriptions, a student can demand to be examined for the degree.

There are five public examinations which he must undergo, and finally defend a thesis.

The examinations are conducted in the following manner, there being usually five candidates and three examiners. The morning of the day on which the first examination is to take place, a subject is placed at the disposal of the candidates, and each is called upon to dissect some part. Subsequently they meet in the public theatre, to which all persons are admitted, and are examined, during two hours,—

On Anatomy and Physiology;

The 2nd examination on some future day,

On Pathology and Nosology;

The third,

On Chemistry, Botany and Pharmacy;

The fourth,

On Hygiène and legal Medicine;

The 5th,

On the Practice of Medicine or Surgery, according as the candidate aspires to the degree of doctor in medicine or doctor in sugery; this is of little consequence, as either degree warrants a man practising either or both branches.

Finally, the candidate must defend before five examiners, a thesis written in the French or Latin language.

On no two occasions has the candidate the same examiner, so that altogether he has to undergo the ordeal of no less than twenty different examiners.

It now remains to enumerate the cost of inscriptions, examinations, thesis, &c., in fact, every expense attending the education of a doctor in medicine or doctor in surgery—

| | Francs |
|---|---|
| 15 Inscriptions cost 50 francs each | 750 |
| 16th, or last Inscription..... | 35 |
| 5 Examinations, 30 francs ..... | 150 |
| Fees upon thesis, &c. ..... | 165 |
| Total..... | 1,100 |

or 50 pounds.

The money thus received forms a general fund, from which the Professors are paid their salaries. They receive no fees whatsoever from the students, to whom the lectures and hospitals are thrown open gratis.

The election of PROFESSORS to the several Faculties was, prior to the restoration of the Bourbons, determined by "Concours," or a public trial of merit, a system still adhered to in the disposal of the minor offices. It is conducted in the following manner. When a vacancy occurs, the DEAN of the Faculty summons a meeting of the professors, and they select from their body a committee, or JURY (as it is termed) consisting of 3, 5, or 12 individuals, (according to the nature and responsibility of the vacant office) who *swear* to act with impartiality as judges of the merits of the several candidates. Public notice being given of the Concours, on the appointed day the jury take their seats in the Amphitheatre of the Faculty, to which the public is indiscriminately admitted, and the candidates are placed in a separate apartment, from which they are not permitted to hold any communication with friends outside. The Concours open by each member of the jury placing a slip of paper containing a question, in an urn. The questions are necessarily determined in some measure by the nature of the office to be disposed of—for instance, the Concours for the anatomical chair, would be principally on anatomy, though by no means altogether confined to that subject; on the contrary, the whole range of medical science may be entered upon on these occasions. The questions being gathered in the urn, one is drawn, and the oldest candidate being introduced, is presented with it—he has a certain number of minutes (varying from 7 to 15) to deliberate and arrange his ideas; he is then required to speak upon it a certain number of minutes—20 or 30—a second candidate is introduced, and the same form is gone through with each successively. The trial is repeated on another day, when each is required to write upon a subject in the Latin language, without referring to books. Lastly, each is required to write a thesis within a given time, (a fortnight generally,) and all on different subjects.

On the day for the examination of the theses they assemble as before. The senior candidate reads his thesis, and as he does so, his assertions are disputed, and he is further examined on every possible subject connected with it, not by the jury, but by *his competitors*, whose interest it is to attack him on every weak point they can find in order to put him "hors du combat."—Each undergoes successively the same ordeal, and finally the jury publicly declares the successful candidate.

In the year 1822, the Faculty of Medicine of Paris was suppressed through political motives, and the election of professors by concours was discontinued when the Faculty was reorganized in the following year. A new office was then created, that of "Agrègè" or Fellow—their number is unlimited; 24 were appointed by the Government in the first instance, and it is now determined to elect a small number annually, and by concours.—When a vacancy takes place amongst the professors, the chair is now filled by the Government electing an individual from the Agrègès to fill it.

## ROYAL COLLEGE OF SURGEONS IN LONDON.

### *COURT OF EXAMINERS.*

In pursuance of their duty to promote the cultivation of sound chirurgical knowledge, and to discountenance practices

which have a contrary tendency, the Court have adopted the following Regulations:—

That the only Schools of ANATOMY and SURGERY recognized by the Court be, *London*, *Dublin*, *Edinburgh*, *Glasgow*, and *Aberdeen*.

That Certificates of Attendance upon the chirurgical practice of an Hospital, be not received by the Court, unless such Hospital be in one of the above recognized Schools, and shall contain on an average one hundred patients:

The Court of Examiners will, however, receive as testimonials of Education, Certificates of Attendance on Provincial Hospitals, containing one hundred patients under chirurgical treatment; provided a Student shall have previously attended two Courses of Anatomical Lectures, and two Courses of Dissections, in any of the recognized Schools of Anatomy. Yet the Court of Examiners require, that the Term of Attendance on such provincial Hospitals shall be of twice the duration of that required at Hospitals in any of the recognized Schools of Anatomy.

And that Certificates of Attendance at Lectures on Anatomy, Physiology, the Theory and Practice of Surgery and of the Performance of Dissections, be not received by the Court, except from the appointed Professors of Anatomy and Surgery in the Universities of Dublin, Edinburgh, Glasgow, and Aberdeen; or from persons teaching in a School connected with, and accredited by the Medical Establishment of a recognized Hospital, in one of the Schools of Anatomy, or from persons being Physicians or Surgeons to any of such Hospitals.

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CANDIDATES for the DIPLOMA will be required to produce, prior to Examination, Certificates, conformably to the above Regulations:—

1. Of being twenty-two years of age;

2. Of having been engaged SIX YEARS, at least, in the acquisition of professional knowledge;

3. Of having regularly attended THREE WINTER COURSES, at least, of Anatomical Lectures; delivered at subsequent periods; and, also, one or more WINTER COURSES of Chirurgical Lectures:

4. Of having performed Dissections during TWO or more subsequent WINTER COURSES;

5. And of having diligently attended, during the term of at least ONE YEAR, the Chirurgical Practice of one of the following Hospitals; viz.

*St. Bartholomew's*, *St. Thomas's*. the *Westminster*, *Guy's*, *St. George's*, the *London*, and the *Middlesex*, in London; the *Richmond* and *Steeven's*, in Dublin; the *Royal Infirmary* in Edinburgh; the *Royal Infirmary* in Glasgow; or the *Royal Infirmary* in Aberdeen; or of twice that term in any of the Provincial Hospitals as above described.

*Such Certificates must also express the Dates of the Commencement and Termination of each Course of Lectures, Dissections, and Period of Attendance on Hospital Practice.*

CANDIDATES under the following circumstances, and of the required Age, are, also, admissible to Examination.

Members of any of the legally constituted Colleges of Surgeons in the United Kingdom.

Graduates in Medicine of any of the Universities of the United Kingdom; who shall have performed Two or more Courses of Dissection, as above specified; and who shall have regularly attended the Chirurgical Practice of an Hospital as above described.

The above Rules are required to be observed by CANDIDATES for the TESTIMONIAL of QUALIFICATION of PRINCIPAL SURGEON in any Service.

CANDIDATES for the TESTIMONIAL of QUALIFICATION of ASSISTANT-SURGEON, in any Service, must have attended Six Months, at least, the Chirurgical Practice of one of the above-described Hospitals; and two or more Courses of Anatomy; one Course of Surgery; and one of Dissections, as specified; and must be twenty-one years of age.

By order:

EDMUND BELFOUR, Sec.

*Candidates are to observe that* Tickets *of* ADMISSION *only, will not be received as* Certificates *or* Evidence *of* ATTENDANCE.

We shall return to the subject of these Regulations.

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## ABUSES IN THE LONDON COLLEGE OF SURGEONS.

*To the Editor of* THE LANCET.

SIR,—There are very few Corporations that can bear the test of public scrutiny, and whenever they are dragged before the bar of public opinion, they invariably shrink from it as if conscious that condemnation must follow. The Corporators of Lincoln's-inn Fields seem to be in this predicament. They feel that the day for restrictions and abuses is past, and that the present Government is resolved no longer to countenance the selfish and narrow views of sordid and groveling monopolists. The public is now pretty well informed concerning the objects which the councilmen of the College have ever kept in view, and they will soon have an opportunity of estimating the manner in which their stewardship has been fulfilled. If these men have acted uprightly and fairly, what have they to fear? Why do they shrink from bringing their acts before the public? If their acts are in accordance with the enlightened spirit of the age, they will be acquitted with honour; if not, where will they find a man sufficiently hardy to tell the Parliament, the public, and the medical profession, that he approves of the acts of the Council, and that if he were one of their number he would sanction them all, or even a part, and therefore that the same spirit that hitherto dictated their measures should henceforth prevail in their Councils. If ten men of credit can be found in Parliament to say this, the Council of the College may esteem themselves fortunate indeed. It has been repeatedly laid down by a patriot Minister, as one of the fundamental axioms of his policy, that "*Knowledge* is power," and that the peace, security, and honour of the country are best secured by extending information through every rank of society, by removing all restrictions which tend to repress energy, and fetter individual exertion, and by giving to every man free scope for the employment of his talents and industry, in whatever pursuit his interest or inclination may lead him. This is the spirit—these are the feelings which now animate the great master minds which direct the Councils of the nation. They tell us that it is idle to attempt to stem the great tide of improvement which is now flowing in every department of human inquiry, and to the benighted few, who dare lift up their puny voices against them, they reply in words never to be forgotten, "If you do not lead the march of improvement you must follow it." Now when the Councilmen of the College are brought before the public to give an account of their proceedings, will it not very naturally be asked have they been leading or following the march of improvement? Are they anxious to put an end to monopoly and restrictions? Are they disposed to increase the facilities for education, and lessen or remove the impediments which stand in its way? We confess that we entertain very decided opinions on all these points, so does the public; but we shall reserve them for the conclusion of our remarks.

Whenever we hear the term College used, somehow or other we associate with it the ideas of study, books, lectures, professors, libraries, &c. &c., and of course as often as we heard the College of Surgeons spoken of, we in our simplicity, never until very lately entertained a doubt of its being a place set apart for the education of youth, and the advancement and diffusion of medical science. But this it seems is quite a mistaken notion of the nature and constitution of Colleges, for in Lincoln's-inn Fields, even now in the nineteenth century, is to be found a College without a single student registered on its books, without professors, books, libraries, or any of those vulgar ingredients in the composition of such bodies. We have, however, very lately been told that there is a library in the College; but that it is reserved exclusively for the use of the Council and their friends; thus a man can only be admitted to the use of

the books, when he has neither eyes to read, nor faculties to understand them, as if to verify the old proverb, "he gets bread when he can't eat it." There is also a Museum, but this (though a gift from the public) is reserved for the Council—the commonalty being permitted for a few days in each year to see it as a curiosity. As to the lectures, they may, it is true, be very good, but they are very few, being about 30 in the whole year. They have in fact no reference to the business of education, they are what is termed "flash lectures," and are addressed merely to the elders of the profession. What we have seen on a late occasion are calculated to stimulate the appetite of the Councilmen somewhat for knowledge, but more for food. These worthy Corporators it seems wish to hear the fame of their patron saint said or sung, according to the taste of the orator selected for the occasion, and then proceed to pour out libations to his memory. A great improvement has recently been made in the composition of these discourses. The Councilmen it seems got tired of having changes eternally rung on the merits of John Hunter, they had been continued *ad nauseam usque*, which is a very bad preparation for dinner, as no man, not even a Corporator, can dine satisfactorily if put to sleep or nauseated before hand. Hence some change became necessary, if even for variety sake, and it is but justice to the last oration, to confess that it had the double merit of praising John Hunter for ten minutes, and stimulating the palates of the council for fifty.

This was all as it should be. The work done should always be proportioned to the fee received; and if an orator is put on half-pay, it is quite right that he should dock his speech and save his breath proportionally. Where is the man that would give full work for half-wages? If the worthy Councilmen resolve to divide the fee for the Hunterian Orations, —if they give but half to the orator who delivers them, and reserve the rest for a jollification, thus paying him for his trouble for composing the speech, and themselves for the weariness of hearing it,—is it not quite fair that the orator should recompense himself in some way? If he cannot get the full fee, is it not natural for him to try and create an appetite for a full dinner? Ask any corporator what is the best preparative for dining? will he not say AN OYSTER—the very sight of it sets the mouth a watering, as we say, by sympathy. What, then, is more natural than that a corporation orator should choose *An Oyster* as the subject of his lucubrations? Ordinary feeders dwell on their oysters for a few minutes only; be it henceforth the privilege of corporators to gloat upon them for an hour, in order to have a full foretaste of the luxuries they are about to enjoy, in gulping down their calapash and calapee, and that, whilst their eyes are regaled by the sight of an oyster ingeniously tortured, their imagination may wander over the delights of crimped cod, and their courage be roused to snap their fingers in the face of the Saints and Dick Martin. Still, should their narrow souls refuse to the orator a fair remuneration, be it our pleasing duty to requite him in fame what they filch from him in money, and hand him down to posterity as the pink of orators and the pride of all corporators, by the high-sounding title of Sir ANTHONY OYSTER.

Fain would we leave these "learned Thebans" to the quiet enjoyment of their oysters and their dinners; we probably would allow them to divide the fee for the Hunterian Oration between the orator who *reads* the speech and the caterer who provides the dinner. We would, in our meekness, merely say, that these old gentlemen have dull wits, but keen appetites; and that, for charity, we would leave to age and imbecility the paltry enjoyment of their few remaining senses; —but this cannot be; for, dull as their wits are, they still have the ingenuity to be mischievous. The members of the Council, it seems, claim credit for being influenced only by pure motives—in all their acts, in all their measures. One of the most distinguished amongst them, on a late public occasion, said, that if all the acts of the Counsil were published, there was not one of them that would not redound to their credit. Is this an attempt to skreen themselves, by pleading honesty of intention? Do they want now to say that their bye-laws were meant for the best, though found to be unjust in principle and most injurious in their operation? —"Suspend your judgment," said Mr. Abernethy, on the occasion alluded to, —What does this mean? Are they about, then, to publish a defence? If they are, we would be glad to supply them with the heads of some of the charges against them; we shall be glad to see this document, and then, no doubt, we shall have an opportunity of saying, "Oh that mine enemy would write a book!" In the mean time we will propose for the consideration of the Council the following questions, which they can have no objection to answer, now that they speak so confidently of their acts and motives, and which they certainly shall be forced to

answer when this case comes before Parliament.

1. Who first brought forward the bye-law now complained of, and what were the special grounds and true objects of it?

2. Who composed the Sub-Committee appointed to report upon it?

3. Was it really intended that it should have a retrospective effect with regard to Messrs. Brookes, Carpue, Grainger, &c.?

4. If not—was it not due to these gentlemen to signify this to them directly? What caused the delays in replying to their written remonstrances? Was not the reply to Mr. Grainger delayed for six weeks?

5. Was it intended to destroy all the provincial Schools of Anatomy by this bye-law, with the view to confine the privilege of teaching to certain persons in London?

6. If so—what effect was that likely to produce on the cost and difficulty of cultivating Anatomy?

7. If the law was rigidly enforced as at first *worded* and intended, how many teachers would it have recognised in London?

8. What are the names of the persons thus intended to be favoured?

9. Why was it not so enforced?

10. Has it had the effect of increasing the number of students in London?

11. Has it not been urged, as one of the palliatives for this measure, that as the Hospital Surgeons give so much time gratuitously to the public, they ought to be remunerated by having a monopoly of the profits of teaching?

12. Do you think that the proposer of this measure was influenced or impelled by jealousy, at having his school diminished by a new school being set up in his neighbourhood? and was not the seconder of it influenced by fear, lest a similar diminution should occur in his own?

13. Look to the first section of your regulations: is it not worded so as to induce apothecaries to become members of your body?

14. If you thus open the door for their admission to the first step, why not to every other?

15. Is it so worded for their good, or for your emolument?

16. Why do you omit all attention to the previous, or school, education of students?

17. By the regulations, a student must be six years at the profession: do you ever inquire how he has spent the first five of them?

18. If not—do you think that he can, in one year, acquire sufficient knowledge to enable him to practise safely?

19. One of your Presidents, some time since, said that "the domestic schools demanded the fostering care of the College:" how is this reconcileable with the passing of a law which tended to destroy several of the London and all the provincial Schools?

MACHAON.

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## LAW-MAKING SHAVERS.

The following Song is said to have been composed by that "Incomparable Wag," Doctor G., and to have been sung a few evenings ago by him, at the President's of the College of Physicians, with unbounded applause:—

*Air*—"A buxom young frog would a wooing go,
Higgledy ho, says old Rowley."

I.

Old Brickbat, the star of the East, is so bright,
So radiant he shines on Mechanics,
Old Brickbat, the star of the East, is so bright,
The noddles of Surgeons are pierced by the light;
So *cutting* tooth-drawing,
Bone-setting, and sawing,
They take to the trade of law-making.

II

The Court of the College of Barbers then met,
Ten mighty knowing old *Shavers*;
The Court of the College of Barbers then met,
And *wash'd* down the solids with Coombe's heavy wet;
(For deliberation,
By a Corporation,
Is always preceded by glutting.)

III.

The President Norris, a Patlander wight,
(We're in debt for this elf to St. Giles's;)
The President Norris, a Patlander wight,
Op'd his 'tatoe-trap first by protesting "'Twas right,
That England should cherish
(Tho' Science should perish)
The *pure* honest worthy Examiners."

IV.

Then John Abernethy propos'd a bye-rule,
(Having both hands in his *pockets*,)
Then John Abernethy propos'd a bye-rule
"That the Court of Exam'ners should suffer no school
To exist but in town,
And none there but their *own*,
And those of their *nephews* and *nieces*."

V.

Benighted Bill Buzzard next grinn'd his assent;
His "rough granite phiz" became smoother;
Benighted Bill Buzzard next grinn'd his assent;
Sir Everard Fuddle hiccupp'd "I'm content,
More pupils will pay me;
Some wet, STOKE, I pray thee,
We cannot make laws without drinking."

VI.

Sir Astley propos'd, as he hitherto found
That subjects stink most in the summer,—
Sir Astley propos'd, as he hitherto found
Knowledge imparted in hot weather 's unsound,
"That no student in future
Should attend summer lecture,
But wait *for his own* in the winter."

VII.

*Mesdames* Harvey and Forster, with *Dowager* Lynn,
Higgledy ho! Neddy Noodles!
*Mesdames* Harvey and Forster, with *Dowager* Lynn,
Agreed; for each voted thro' thick and thro' thin,
Whensoever the elf
Could expect to gain pelf,
'Tis the last mental effort age leaves us.

VIII.

As the public had found out their humbug and trick,
And ceased to employ these old Doodles;
As the public had found out their humbug and trick,
They forthwith determined other pockets to pick;
So these bye-laws they made,
To keep all the trade
In their own hands, of fleecing the pupils.

# HOSPITAL REPORTS.

## GUY'S HOSPITAL.

*Fracture of the Os Frontis into the Frontal Sinus, with extravasation of Air into the Cellular Membrane of the Eyelids.*

John Emes, a young lad about 16 years of age, happened, as he was going along the street with a load, to run inadvertently against a person passing in the opposite direction; a scuffle ensued, in which he received a severe blow immediately over the right frontal sinus. When he arrived home, he was astonished to find the part apparently uninjured, the eye too being free from any swelling or discolouration. About an hour from the accident, having occasion to blow his nose, the eyelids and parts adjacent became immediately inflated, so as completely to close the eye; and he states, with confidence, that he felt the air rush, as it were, into those parts. Shortly after this he applied at the Hospital, and was admitted into Accident Ward on the 3d of March, under the care of Mr. Morgan. The eye-lids were much distended, and so closely approximated as not to be separated by any voluntary effort of the patient; the eyebrow was also puffed up, and the cellular membrane between the ear and orbit was inflated in a similar manner. The parts were not at all painful upon pressure, they yielded a crackling sensation to the touch, and were free from discolouration. The supposed seat of the fracture was at a small distance above the superciliary ridge, where a slight depression, but no crepitus, could be felt. The globe of the eye was perfectly natural. The treatment adopted on this occasion was very simple. Two small incisions were made through the integument about the eighth of an inch behind the external angle of the frontal bone, which allowed the air to escape, and the swelling subsided in 24 hours, leaving the eye and its appendages in a perfectly healthy condition.

## ST. THOMAS'S HOSPITAL.

*Anomalous case, resembling Fungus Hæmatodes of the Eye.*

James Trigwell, ætat. 60, a blacksmith by trade, was admitted into Isaac's Ward, on February 23, for an affection of the right eye, which, *Mr. J. H. Green* denominate *fungoid*.

From his account, it appears, that about four years ago, he received a severe blow upon it, from a stone, or other hard substance, thrown at him, which produced a considerable degree of inflammation. This, he says, left the organ in a very weak state, so that from time to time, it was repeatedly attacked with inflammation from the slightest causes, and, that about a year and a half since one of these attacks deprived him of vision. The eye now gradually began to swell, until it attained its present size, and during its progress he complained of much pain in his head; at length an opening was formed in the cornea by ulceration, through which a bloody fluid escaped, which afforded immediate relief.

The globe of the eye is nearly enlarged to double its natural size; it projects considerably from the orbit, facing outwards and downwards, and carrying the upper lid before it, by which it is almost concealed. On raising the lid, the tunica conjunctiva is of a deep red colour, and much thickened; the cornea is nearly destroyed, except a small portion near the inner edge, and the iris protrudes through the aperture in the form of an irregular excrescence, which bleeds on the slightest touch, and on which may be seen small sloughs of an ash colour, the more prominent parts having a deep purple tinge. There is much pain in the eye upon pressure; the discharge which issues from behind the iris, is of a thin, purulent character, with some streaks of blood in it. The common lead-wash was ordered to be frequently applied, and the eye to be covered by a green shade. Mr. Tyrrell, in company with Mr. Green, saw the man shortly after his admission, and without hesitation declared, "that the disease was not malignant, that it every now and then occurred in blacksmiths, from small pieces of iron having pierced the cornea, and entering the globe, thus giving rise to this singular affection."

March 1. The eye feels much easier, and discharges a thin, curdy, purulent fluid; pain and inflammation somewhat abated; omit the lead-wash; apply the poppy fomentation to the eye, and a blistering plaster to the right temple, to be made perpetual.

2. Eye much diminished in size; upper lid less tense; discharge is unabated.

4. The discharge continues, and assumes more of a puriform character; there is no bleeding from the eye, which is gradually shrinking to its natural size.

8. Opens the eye with ease; conjunc-

tiva less vascular; continue the fomentation.

10. The eye is nearly reduced to its natural size; there is less protrusion of the iris; the conjunctiva is much less inflamed, and the discharge is very trifling, but of the same quality as before.

13. The iris is granulating; the small portion of cornea which remains has become thickened, and permeated with small vessels, carrying red blood.

16. The eye is about its natural size; the aperture through which the iris protruded is very much contracted, so that only a small portion of that body is visible; the conjunctiva still remains inflamed.

## ST. BARTHOLOMEW'S HOSPITAL.

*Case of extensive Phagedenic Ulcer.*

[Continued from No. 134.]

19. The continued application of the yeast poultice has effected the almost entire separation of the slough, which has left a wound of a most alarming appearance. Continue as before.

20. The whole of the slough has now been completely detached, and we do not exaggerate when we state that the present wound is a foot in length, and eight inches in breadth; it extends in an oblique direction from the iliac region across the inguinal region to the inner side of the thigh, laying bare the external oblique to about three inches above Poupart's ligament, the more central part of the upper portion of the tensor vaginæ, that part of the sartorius which extends from its origin to the inner side of the thigh, the lower part of the psoas magnus, part of the adductor longus, the inguinal glands, some of which have sloughed away, and last, though not least, the femoral sheath; in short, it is as Mr. Lawrence, who saw the case to-day, justly remarked, one of the completest pieces of living dissection that can well be imagined; truly horrible, and distressing to behold.

Mr. Vincent now determined to have recourse to the cinnabar fumigation.* The strength of the poor fellow, as a matter of course, is greatly exhausted, from the constant and severe pain which he suffers; his nights are spent in watchfulness, and from his general condition, it would seem that nature is unable to repair the extensive injury. The pulse is small and frequent, 110, and the tongue is moist and loaded with dirty white coating. Let him have 12 oz. of wine daily, and continue the meat and pills.

21. The fumigation, which was repeated twice yesterday, has caused great pain, and produced a considerable degree of inflammation around the contiguous parts. It was therefore ordered to be used only once in the 24 hours, and lint soaked in water to be applied over the surface of the wound in the intermediate time.

23. To our surprise we find the man is considerably improved; the surface of the sore has assumed quite a healthy aspect, and the inflammatory blush, which yesterday extended around the whole circumference of it, has greatly subsided. He has likewise enjoyed some refreshing sleep, notwithstanding a troublesome short cough frequently disturbs him. Pulse 96, and firmer than yesterday, and he takes his meat and wine with a relish.

25. The change which has taken place since the application of the fumigation is really surprising; healthy granulations cover the whole of the wound, and already the separate muscles are no longer distinguishable. Continue as before.

28. Rapidly improving. The exposed surface continues quite healthy, and the symptoms are all favourable.

30. The granulations are rapidly filling up the wound, which now presents an even surface. Mr. Vincent considered it no longer necessary to use the fumigation, and it has therefore been discontinued. A weak solution of the sulphate of zinc was ordered to be kept applied over the whole surface to assist in effecting cicatrization, and he was also ordered to have the common Hospital meat diet, and to continue the pills.

Dec. 2. Going on very favourably. The circumference of the wound is gradually diminishing.

17. No unfavourable symptoms. The lotion is kept constantly applied, and the size of the wound is much diminished.

Feb. 24. The cicatrization of such an extensive surface has necessarily required a very long time. Since our last report the man has been removed into another ward, and the zinc lotion has been the only application applied to the exposed surface.

The sore has continued gradually and progressively healing, and at present not more than the size of a crown piece remains to cicatrize. The man's general health has also continued pretty good, and in the course of a very few days he will be discharged.

* In a late Number we described the manner in which this remedy is employed.